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AND

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THE

UNIVERSAL CAMBIST

AND

Commercial Instructor;

BEING A FULL AND ACCURATE TREATISE ON THE

EXCHANGES, MONIES, WEIGHTS, AND MEASURES,

OF ALL

TRADING NATIONS AND THEIR COLONIES;

WITH

AN ACCOUNT OF THEIR BANKS, PUBLIC FUNDS, AND PAPER CURRENCIES.

BY P. KELLY, LL.D.

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VOL. II.

The Second Edition,

INCLUDING

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FROM AN ACTUAL COMPARISON OF THEIR STANDARDS,

BY THE ORDER AND AID OF THE BRITISH GOVERNMENT.

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INTRODUCTION (TO VOL. II.),

CONTAINING EXPLANATIONS OF THE CHAIN RULE, WITH SUNDRY ILLUSTRATIONS RELATING TO EXCHANGE AND BULLION OPERATIONS.

EXCHANGE, which forms the leading subject of this volume, is a science of the first importance both in Commerce and Political Economy. By its direct and common application, foreign debts, loans, and subsidies are paid, and the wealth of nations circulated without the trouble or expense of remitting specie; and, by its more complex operations, (called Arbitrations of Exchange,) great profits are frequently made; and not only private fortunes are thus realized, but even public credit has been sometimes sustained by skilful Cambists and Negotiators.

A science, therefore, so highly interesting to nations, governments, and individuals, ought to be studied by Statesmen and Travellers, as well as by Merchants and all other persons concerned in foreign trade.

The Introduction to the First Volume of this work contains an Exposition of the Theory of Monies, Coins, Weights and Measures; and the Principles and Laws of Exchange are stated in the leading pages of the second volume; but, with a view to render the science still more easy and accessible, the chief methods of calculation are explained and illustrated in the present Introduction.

In order to study Exchanges with advantage, the following Rules should be well understood, namely—The Rule of Three, direct and inverse, single and compound; Fractions, vulgar and decimal; and the Chain Rule. The last mentioned only seems to require elucidation in this place, as all the rest are sufficiently well explained in books of common arithmetic.*

---

* THE CHAIN RULE (also called the *Rule of Exchange, Conjoint Proportion,* and the *Rule of Reduction,)* is indispensably necessary in the higher operations of Exchange, as well as in arbitrations of bullion, specie, and merchandise; and yet it does not appear to have been explained by English Authors with that attention which its great utility merits. Foreign Merchants are generally very expert in their application of this rule to commercial computations: and it is, in a great measure, to this that their acknowledged superiority in the science of Exchange may be attributed.

The CHAIN RULE consists of a series of terms which bear a certain proportion to each other, and which are accordingly arranged in two adjoining columns; the first to the left called *Antecedents*, and the second to the right called *Consequents*.

The Terms are arranged in the way of equations, and connected, as it were, like the links of a chain: and, however numerous they may be, the same result is obtained by one operation as by several statings in the Rule of Three.

This Rule, being chiefly useful in exchanges, is generally explained by examples of foreign monies, weights, or measures, but as such are seldom well understood by learners, they tend rather to obscure than to elucidate the subject. The following common articles are therefore first chosen as better adapted for illustration.

EXAMPLE I.—If 3 lb. of tea be worth 4 lb. of coffee, and 6 lb. of coffee worth 20 lb. of sugar, how many pounds of sugar may be had for 9 lb. of tea?

First, by the Double Rule of Three.

	lb. Tea.		lb. Coffee.			lb. Tea.		lb. Coffee.
As	3	:	4	:	:	9	:	12

and

	lb. Coffee.		lb. Sugar.			lb. Coffee.		lb. Sugar.
As	6	:	20	:	:	12	:	40

Hence, 9lb. of tea are worth 40lb. of sugar.

SOLUTION BY THE CHAIN RULE.

Distinguish the several Terms into Antecedents and Consequents, in the following manner:—

1. Enter on the right the given sum or Term on which the operation is to be performed, (which in the foregoing question is 9lb. of tea,) and call this the *Term of Demand*.

2. On the left of this term, and a step lower, enter the first Antecedent, which must be of the *same kind or name as the Term of Demand, and of the same value as the annexed Consequent;* thus, (according to the question,) 3lb. of tea = 4lb. of coffee.

3. In the same manner, let the second Antecedent be of the same name as

the second Consequent, and of the same value as the third Consequent; and so on for any given number of Terms: thus, 6 lb. of coffee = 20 lb. of sugar.

4. The Terms being thus arranged, divide the product of the Consequents by the Product of the Antecedents, and the quotient will be the answer in the denomination of the *last Consequent*. Thus

9 lb. tea.
3 lb. tea = 4 lb. coffee.
6 lb. coffee = 20 lb. sugar.

Hence $\frac{20 \times 4 \times 9}{6 \times 3} = \frac{720}{18} = 40$ lb. of sugar,—the answer.

By the above example it will be seen, that, in the arrangement of Antecedents and Consequents, each article is twice entered, except that sort in which the answer is required; and which is called the *Odd Term*. Here sugar is the Odd Term, and the answer must be in this denomination.

It should be also observed that no two entries of one denomination are in the same column; and, as they are placed in the way of equations, it is manifest that the quantities on both sides, which are equal to one another, are cancelled in the operation; and, therefore, the quotient or answer will be evidently in the denomination of the Odd Term, or last Consequent.

Proof of the Chain Rule.

This Rule may be proved by reversing the operation, that is, by what is called the *Doctrine of Contraries*, beginning with the Answer as the Term of Demand, and making the last Consequent correspond with the first Antecedent. Thus—

40 lb. sugar.
20 lb. sugar < 6 lb. coffee.
4 lb. coffee < 3 lb. tea.
*

Then $\frac{40 \times 6 \times 3}{20 \times 4} = \frac{3 \times 3}{1 \times 1} = 9$ lb. of tea.

The operation of reducing a statement in this Rule may be abridged by striking out the same numbers when they occur in both columns, or by re-

* The above zigzag line is introduced to exemplify a method sometimes used for connecting the terms of a statement, and is therefore called the *Chain*. Its utility is obvious.

ducing them to a lower denomination where they admit of a common measure or divisor, as in reducing a vulgar fraction to its lowest terms.*

The Chain Rule exemplified by an Operation in Reduction, and also in the Single Rule of Three.

EXAMPLE II.—Let it be required to reduce £2 into farthings, supposing the pound = 20 shillings, the shilling = 12 pence, and the penny = 4 farthings.

2 Pounds,—Term of Demand.
1 Pound = 20 Shillings.
1 Shilling = 12 Pence.
1 Penny = 4 Farthings,—Odd Term.

Hence, $\frac{2 \times 20 \times 12 \times 4}{1 \times 1 \times 1} = 1920$ Farthings.

These farthings may be reduced to pounds by reversing the operation as before; that is, by making 1920 the Term of Demand, and £2 the Odd Term.

EXAMPLE III.—Let it be required to find the value of 7 yards of cloth, if 3 yards of the same be worth 45 shillings.

7 Yards,—Term of demand.
3 Yards = 45 Shillings,—Odd term.

Hence, $\frac{45 \times 7}{3} = 105s.$

From the above examples the principle of the Chain Rule is obvious, and it may be further demonstrated by an algebraic equation.

Thus, suppose x = the number of Shillings sought,
then x = the value of 7 Yards.
and 3 Yards = 45 Shillings.

Hence, $3x = 45 \times 7 = 315$

$x = \frac{315}{3} = 105s.$

Or thus,

As 3 : 45 :: 7 : x

Hence, $3x = 315$ and $x = 105s.$

* In finding a common measure it may be useful to observe the following properties of numbers:—

A number is divisible by 2, if the last figure be even; it is divisible by 4, if the two last figures be divisible by 4; and it is divisible by 8, if the three last figures be divisible by 8.

A number is divisible by 3, if the sum of the digits be divisible by 3; it is divisible by 6, if the last figure of such sum be even; and it is divisible by 9, if the sum of the digits be divisible by 9.

Every number is divisible by 5, if the last figure be a 5 or a cipher; and all ciphers may be equally suppressed at once from the Antecedents and Consequents.

The following investigation of the Chain Rule may be considered more comprehensive than the foregoing:

Suppose A, B, C, D, &c. to be several sorts of goods; and m, n, p, q, &c. given numbers; and the value of these goods are,

Antecedents.		Consequents.
m A	=	n B
p B	=	q C
r C	=	s D
t D	=	v E

To find what quantity of the last sort is equal to a given quantity of the first; and the reverse.

Let z times the last $= y$ times the first; that is, let $z\,\mathrm{E} = y\,\mathrm{A}$.

Multiply all these equations together; the first side by the first, and the second by the second. Then we have $m\mathrm{A} \times p\mathrm{B} \times r\mathrm{C} \times t\mathrm{D} \times z\mathrm{E} = n\mathrm{B} \times q\mathrm{C} \times s\mathrm{D} \times v\mathrm{E} \times y\mathrm{A}$. Whence $mprtz = nqsvy$. Then if the quantity of the last sort be required, $z = \frac{nqsvy}{mprt}$. But if the quantity of the first sort be sought, $y = \frac{mprtz}{nqsv}$.

Whence the following general Rule, which is, in substance, that already given.

General Rule.

Place the Terms in two columns, so that there may not be two of a sort in either column. Divide the product of the numbers in the column which has the Odd Term, and the Term of Demand, by the product of the numbers in the other column. The quotient is the quantity of that sort which stands single.

It should be noticed that in the above demonstration there is no Term of Demand, as in the preceding examples; for here that Term is understood to be unity, and it may be placed over either column, according to the conditions of the question; observing that the product of the Terms of such column must be always the dividend.

It may be also remarked that the Term of Demand is, by some Authors, placed under the Consequents, instead of making it the first link of the chain, as in the present work. In both cases the results are the same; but there is this advantage in placing it above, that it serves as a direction to the first Antecedent, which must be of the same denomination.

By the Chain Rule the Proportions or Ratios between the Weights and Measures of different places may be thus determined :

Example IV.—Suppose 10 lb. of London = 11 lb. of Rome, and 26 Marks of Spain = 16 lb. of London, what is the Ratio between the Roman Pound and the Spanish Mark?

		1 lb. Rome.
11 lb. Rome	=	10 lb. London.
16 lb. London	=	26 Marks Spain.

Hence $\frac{1 \times 10 \times 26}{11 \times 16} = \frac{65}{44}$. Therefore 44 lb. of Rome = 65 Marks of Spain.

Or thus, let R = Rome, L = London, and S = Spain; then per question,

$$11\,R = 10\,L, \text{ and } 26\,S = 16\,L.$$

Hence $L = \frac{26\,S}{16}$ and $L = \frac{11\,R}{10}$ $\therefore \frac{11\,R}{10} = \frac{26\,S}{16}$ and $176\,R = 260\,S$, or $44\,R = 65\,S$.

Example V.—Required the Proportion between the Metre of France and the Foot of Cremona, supposing that 48 of the latter = 56 English Feet, and that the Metre = 39,371 English Inches?

		1 Foot of Cremona.
48 Feet Cremona	=	56 Feet English.
1 Foot English	=	12 Inches.
39,371 Inches	=	1 Metre.

Result, $\frac{14}{39,371}$. Hence 14 Metres = 39,371 Feet, or 1 Metre = 2,812 Feet.

In determining Ratios of this kind, it is indifferent which of the Numbers to be compared is made the Leading Term; but when a given quantity or sum of money is to be reduced to another, it should be made the first consequent.

Example VI.—Required the sterling value of a Kilogramme of Gold, $\frac{9}{10}$ fine, at £4 per Ounce Troy, $\frac{11}{12}$ fine?

		1 Kilogramme.
1 Kilogramme	=	15434 Troy Grains.
480 Grains	=	1 Ounce.
10 Ounces Fr. stand.	=	9 Ounces fine.
11 Ounces fine	=	12 English standard.
1 Ounce Eng. stand.	=	4 Pounds.

Result, £126 : 5 : 6

The Chain Rule exemplified by Foreign Monies.

Suppose £1000 sterling is to be remitted to Cadiz, and the direct Exchange is 40d. sterling per Piastre or Dollar of Exchange, but the Remitter wishes to send it through Holland and France; it is required to know which is the most advantageous, the direct or indirect Remittance; the Quotation of the Course of Exchange being as follows ?—

London on Amsterdam, 10 Florins 10 Stivers per Pound sterling.
Amsterdam on Paris, 60 Pence Flemish for the Ecu of 3 Francs.
Paris on Cadiz, 15 Francs for 1 Doubloon of 4 Dollars of Exchange.

STATEMENT.

		£1000 Sterling.
1 Pound Sterling	=	10½ Florins.
1 Florin	=	40 Pence Flemish.
60 Pence Flemish	=	3 Francs.
15 Francs	=	1 Doubloon.
1 Doubloon	=	4 Dollars.

$$\text{Hence } \frac{1000 \times 10{,}5 \times 40 \times 3 \times 4}{60 \times 15} = \frac{50400}{9} = 5600 \text{ Dollars.}$$

PROOF.

		5600 Dollars.
4 Dollars	=	1 Doubloon.
1 Doubloon	=	15 Francs.
3 Francs	=	60 Pence Flemish.
40 Pence Flemish	=	1 Florin.
10½ Florins	=	1 Pound Sterling.

$$\text{Hence } \frac{5600 \times 15 \times 60}{4 \times 3 \times 40 \times 10{,}5} = \frac{5040000}{5040} = 1000 \text{ Pounds Sterling.}$$

From this operation it appears that, by the indirect exchange, £1000 sterling will produce 5600 Dollars, which gives the Dollar at 42$\frac{4}{7}$d. sterling.

Thus, the direct exchange is more profitable than the indirect to the *Remitter*, because he would obtain 6000 Dollars at 40*d.* each; whereas, by the circular remittance, he could receive only 5600: while, on the contrary, the indirect exchange would be most advantageous to the *Drawer* in the same proportion. But these different interests will be more fully exemplified under the article *Arbitration of Exchange.*

*New Arrangement of the Chain Rule.**

From the foregoing Examples it is obvious that the terms of the Chain Rule may be arranged horizontally, in the way of Fractions, making the Consequents the numerators and the Antecedents their denominators respectively; and the result may then be determined by multiplication; that is, by the common operation of reducing a compound fraction to an equivalent simple one.

Thus, let the Term of Demand be the numerator of the first fraction, observing that its denominator be of the same kind, and equal in value to the second numerator: the denominator of the second, of the same kind as its numerator, and of the same value as the third numerator; and so on until you arrive at the numerator of the kind sought, which is the Odd Term, and which is, of course, without a denominator.

This may be exemplified by the foregoing problem, p. xi.

Thus, let x = the number sought,

$$\text{Then } x = \frac{\text{£ sterl. } 1000}{1} \times \frac{\text{S.Flem. } 35}{1} \times \frac{\text{D.Flem. } 12}{60} \times \frac{\text{Fr. } 3}{15} \times \frac{\text{Doub. } 1}{1} \times \frac{\text{Doll. } 4}{-} = \text{Doll. } 5600.$$

Reverse operation.

$$x = \frac{\text{Doll. } 5600}{4} \times \frac{\text{Doub. } 1}{1} \times \frac{\text{Fr. } 15}{3} \times \frac{\text{D.Flem. } 60}{12} \times \frac{\text{S.Flem. } 1}{35} \times \frac{\text{£ st. } 1}{-} = 1000.$$

---

* This method of arranging the Chain Rule has been recently published at Paris, in *M. Soulet's Exchanges*, edited by *M. Garnier*. The following is his *Formula:*

$$x = \frac{a}{a'} \;//\; \frac{b}{b'} \;//\; \frac{c}{c'} \;//\; \frac{d}{-} \;\&c.$$

By this Formula it is understood that a is the Term of Demand. Also, that a' is of the same kind as a, and in equation with b; that b' is of the same kind as b, and in equation with c; that c' is of the same kind as c, and in equation with d, and so on.

The signs of equality diagonally placed denote the equality between each denominator and the following numerator. The signs, however, of multiplication in the preceding examples seem to be equally proper.

This new method of arrangement is obviously more concise than the old; but what it gains in brevity it perhaps loses in perspicuity. It may, however, be sometimes used with advantage especially by persons who understand the old method.

Another kind of fractional arrangement is given in *Lacroix's Arithmetic*, where the denominators are removed each one place to the right. The following is his method (adopting *Garnier's* symbols)—

$$x = \frac{a}{-} \times \frac{b}{a'} \times \frac{c}{b'} \times \frac{d}{c'} \;\&c.$$

THE USE OF LOGARITHMS AND FIXED NUMBERS IN BULLION AND EXCHANGE OPERATIONS.

Although the application of Logarithms and Fixed Numbers in Exchange Calculations is explained in the present volume, p. 129, yet some additional illustrations and examples may be useful in this part of the work.

The use of Logarithms in all sciences is to diminish labour, as they perform by addition and subtraction what is obtained by the multiplication and division of common numbers. Hence, in the reduction of a statement of the Chain Rule, *if the Logarithms of the Consequents be added together, and from this sum the amount of the Logarithms of the Antecedents be subtracted, the difference will be the Logarithm of the answer.*

Or, *the same result may be obtained by adding to the said sum of the Consequents the arithmetical complement of the said sum of the Antecedents*, rejecting *ten* in the Index.

Tables of Logarithms are inserted in some books of exchange adapted to the subject; that is, there are negative Logarithms for fractional quantities, as well as positive for whole and mixed numbers; but all such may be deduced from the common tables, by the rules generally given. Thus, the Logarithm of a vulgar fraction is found by *reducing* it *to a decimal;* or by *subtracting the Logarithm of the Denominator from that of the Numerator.** *(See Dr. Hutton's Mathematical Tables, p.* 132.)

When fractions occur in the Chain Rule, the most convenient method is to convert them into whole numbers, by *multiplying the fractional quantity by the denominator, and also any term in the other column by the same figure.* Thus, an antecedent of $\frac{7}{12}$, and a consequent of 9 may stand 7 and 108, without altering the ratio. Or, 5 and $11\frac{3}{4}$ may be converted to 20 and 47. This method of clearing a statement of fractions greatly simplifies the operation; and when Logarithms are used there is no advantage in bringing terms to low denominations, unless such may be reduced to unity or expunged altogether; as it is as easy to find the Logarithm of a large number as of a small one.

* Tables of Logarithms, adapted to Exchanges and other commercial purposes, have been published by *Gerhardt*, of Berlin; *Reishammer* of Paris; and by *Bonhote*, *Dubost*, and *Preston*, of London.

Fixed Numbers are of great utility in exchanges, whether they are used as Logarithms or not. They are peculiarly convenient in bullion operations where the same kind of questions daily occur, as will be exemplified in the remaining part of this Introduction. But before the following Examples are studied, the Rules of Arbitration (p. 107) should be well understood.

In every long statement by the Chain Rule there are several constant or invariable proportions, as the number of shillings in a Pound, or of Penny-weights in an Ounce; and these may, by the rule of Reduction, be converted into one number only, which is called *Fixed*. Thus, in the foregoing example, p. xi., the figures 12, 3, and 4, are constant, and the Fixed Number thence obtained is 144, which, reduced with the other numbers, will give the solution $16 \times 50 \times 7 = 5600$.

In Example VI. page x. there is but one variable number; viz. £4, the price of an ounce of gold; and if the product of the other consequents be divided by that of the antecedents, the result will be 31,569, which will serve as a Fixed Number for all such questions; and this, multiplied by the price per ounce, will give the answer; thus, $31{,}569 \times £4 = £126{,}276$.

Now if the same Kilogramme had been bought at Paris for 3156 Francs 90 Centimes, the ratio between those two prices would give the *Course of Exchange*: for as 126,276 : 3156,90 :: £1 : 25 Fr. Thus the rate would be 25 Francs for 1 Pound sterling; but it should be observed that although the price of Bullion and the Course of Exchange generally regulate each other, yet extraordinary demands cause variations in their computed proportions, which variations, however, have a general tendency to correct themselves.

In Bullion operations the following proportions will be found useful:

		Eng. Oz. Troy.
60 Marks of Hamburgh or Cologne	=	451
80 Marks of Amsterdam	=	633
61 Oz. Paris, Poids de Marc	=	60
1 Kilogramme	=	32,154
31,1 Grammes	=	1
5 Marks of Spain, or 250 Castellanos	=	37
8 Marks of Portugal	=	59
144 Oz. of Leghorn, or Florence	=	131
100 Oz. of Naples	=	86
11 Oz. of Rome	=	10

		Oz. Eng. Stand. fineness.
1000 Spanish Dollars	= 866 oz. Troy =	835
1000 Doubloons	= 868 oz. Troy =	853
1000 Joanese, or Ports	=	460
55 English ounces French Gold	=	54
37 Ditto French Silver	=	36
19 Marks fine Silver, Amsterdam	=	164
34 Marks of Hamburgh Ducats	=	273
8 Marks fine Silver of Hamburgh	=	65
111 Oz. of Dollars	=	107
48 Oz. of do. = 43 oz. of fine Silver.		

GOLD IN BARS.

To calculate the Course of Exchange from the Price of Bullion, and the contrary. Also to find Fixed Numbers for the Solution of such Questions.

EXAMPLE I.—When Gold is sold at Hamburgh at 104 Sols banco per Ducat of 23½ Carats fine, and at London at 78s. 2d. per standard Ounce, what should be the Course of Exchange, supposing that 67 Ducats make 1 Cologne Mark fine, and that 60 Marks weigh 451 Ounces Troy?

		1 Pound sterling.
1 Pound sterling	=	20 Shillings.
78$\frac{1}{6}$ Shillings sterling	=	1 Ounce standard.
451 Ounces standard	=	60 Marks standard.
47 Marks $\frac{44}{48}$	=	44 Marks $\frac{47}{48}$.
1 Mark	=	67 Ducats.
1 Ducat	=	104 Shillings Lubs Banco.
6 Shillings Lubs B°.	=	1 Shilling Flemish.

As the prices of gold are the only variable numbers in the above statement, the Fixed Number may be thus determined:

$$\frac{20 \times 60 \times 44 \times 67}{451 \times 47} = 27{,}815, \text{ the Fixed Number.}$$

Hence, $27{,}815 \times 104 \div 78\frac{1}{6} = 37$ Shillings, Flemish (the Course of Exchange) for £1 sterling.

By the above Fixed Number, with the course of exchange and the price of bullion in one place, it is plain that its price may be found in the other place.

EXAMPLE II.—When Gold is sold at Amsterdam at an advance of 17 per cent. on the Tarif price of 355 Florins per Mark fine, and in London at 78s. per standard Ounce, what is the Course of Exchange, supposing that 80 Marks of Amsterdam weigh 633 Ounces English Troy?

		1 Pound sterling.
1 Pound sterling	=	20 Shillings.
78 Shillings	=	1 Ounce standard.
12 Ounces stand.	=	11 Ounces fine.
633 Ounces fine	=	80 Marks of Amsterdam.
1 Mark	=	355 Florins.
100 Florins	=	117 with the Premium.

The invariable numbers in the above statement are

$\frac{20 \times 11 \times 80 \times 355}{12 \times 633 \times 100} = 8{,}225$ the Fixed Number, which $\times 117 \div 78 = 12$ Fl. $6\frac{3}{4}$ St. or 41s. 1d. Flemish per Pound sterling, the Course of Exchange.

Example III.—What is the Course of Exchange between Paris and London resulting from the price of Gold; viz. 8 per Mille premium on the Tarif-price, (see vol. i. p. 142,) and 78s. per Ounce English standard?

			1	Pound sterling.
1	Pound sterling	=	20	Shillings.
78	Shillings	=	1	Ounce standard.
12	Ounces standard	=	11	Ounces fine.
32,154	Ounces fine	=	1	Kilogramme fine.
1	Kilogramme fine	=	3434 f. 44 c.	Tarif price.
100	Francs	=	100,8	with the Premium.

The invariable numbers in the above statement are $\frac{20 \times 11 \times 3434\text{ f. }44}{12 \times 32{,}154 \times 100} = 19{,}5823$, the Fixed Number.

Hence $19{,}582 \times 100{,}8 \div 78 = 25$ fr. 30 c. per Pound Sterling, the Course of Exchange.

Example IV.—If the price of Gold at Cadiz be 30 Reals per Castellano of $\frac{22\frac{1}{2}}{24}$ fine; and in London 934½d. per ounce standard, (the Mint price,) what is the Course of Exchange, &c.?

			1	Piastre.
1	Piastre	=	8	Reals.
30	Reals	=	1	Castellano.
44	Castellanos $\frac{45}{48}$	=	45	Castellanos $\frac{44}{48}$.
250	Castellanos	=	37	Ounces Troy.
1	Ounce	=	934½	Pence.

Reduced, gives the Course of Exchange = 37¾d. per Piastre.

The invariable Numbers are $\frac{8 \times 45 \times 37}{44 \times 250} = 14{,}531$, the Fixed Number.

Example V.—If Gold be sold at Lisbon for 1700 Rees per Outava of $\frac{22}{24}$ fine, and in London at the Mint price, what is the Course of Exchange?

			1	Milree.
1	Milree	=	1000	Rees.
1700	Rees	=	1	Outava.
64	Outavas	=	1	Mark.
8	Marks	=	59	Ounces Troy.
1	Ounce	=	934½	Pence.

Reduced, gives 63⅓d. per Milree, the Course of Exchange.

The invariable Numbers are $\frac{1000 \times 59}{64 \times 8} = 115{,}234$, the Fixed Number.

Example VI.—If the price of Gold at Leghorn be 108 Lire per Ounce fine, and in London the Mint price, what is the Course of Exchange, &c.?

			1	Pezza.
4 ×	1	Pezza	=	$5\frac{3}{4}$ Lire × 4 = 23.
	108	Lire	=	1 Ounce fine of Leghorn.
	144	Oz. of Leghorn	=	131 Ounce of London.
	11	Oz. fine	=	12 Ounces standard.
	1	Oz. standard	=	$934\frac{1}{2}$ Pence.

Reduced, gives 49,37d. per Pezza, the Course of Exchange.

The invariable Numbers are $\frac{23 \times 131 \times 12}{4 \times 144 \times 11} = 5{,}706$, the Fixed Numbers.

The foregoing Examples solved by Logarithms.

Hamburgh,	Fixed Number, ...	27,815	Log.	1,44428
	Hamburgh Price, ..	104	Log.	2,01703
	London Price, ...	$78\frac{1}{6}$	Ar. Com.*	8,10798
	Course of Exchange	37,091	Log.	1,56929
Amsterdam,	Fixed Number, ...	8,225	Log.	0,91514
	Amsterdam Price,..	117	Log.	2,06819
	London Price, ...	78	Ar. Com.	8,10790
	Course of Exchange,	12,338	Log.	1,09123
Paris,	Fixed Number, ...	19,582	Log.	9,29186
	Paris Price, ...	100,8	Log.	3,00346
	London Price, ...	78	Ar. Com.	8,10790
	Course of Exchange,	25,30	Log.	1,40322
Cadiz,	Fixed Number, ...	1,201	Log.	0,08310
	London Price,.....	934,5	Log.	2,97057
	Cadiz Price, ...	30	Ar. Com.	8,52287
	Course of Exchange,	37,72	Log.	1,57654

* The Arithmetical Complement is found by subtracting the Logarithm of the given Number from 10, and thus the operation is performed by addition only, and with four rows of figures instead of five. See p. 130.

Lisbon,	Fixed Number, ...	115,23	Log.....	2,06156
	London Price,.....	934,5	Log.....	2,97057
	Lisbon Price, ...	1700	Ar. Com.	6,76955
	Course of Exchange,	63,34	Log.....	1,80169
Leghorn,	Fixed Number, ...	5,706	Log.....	0,75633
	London Price,.....	934,5	Log.....	2,97057
	Leghorn Price, ...	108	Ar. Com.	7,96657
	Course of Exchange,	49,37	Log.....	1,69347

SILVER IN BARS.

To find the Course of Exchange between London and the foregoing Places, resulting from the following Prices of Silver, viz.

Hamburgh,.....	27	Marks Banco, per Cologne Mark fine.
Amsterdam, ...	26	Florins, per Mark fine.
Paris,.....	3	per Cent. Premium on the Tarif price of 218 Fr. 89 c. per Kilogramme fine.
Cadiz,.....	103	Reals of Plate, per Mark fine.
Lisbon, ...	990	Rees, per Ounce fine.
Leghorn, ...	84	Lire, per Libra of 12 Ounces fine.
London,.....	58	Pence, per Ounce $\frac{37}{40}$ fine.

STATEMENTS AND RESULTS, (see p. xii. and xiv. also p. 19, Vol. II.)

	£ ster.		Pence.		Oz. stan.		Oz. fine.		Mks.		Mks Bo.		S.Flem.	Course of Ex.	Fixed Num.
Hamburgh,..	$\frac{1}{1}$	×	$\frac{240}{58}$	×	$\frac{1}{40}$	×	$\frac{37}{451}$	×	$\frac{60}{1}$	×	$\frac{27}{3}$	×	$\frac{8}{-}$	= 36,66	78,758
Amsterdam,.	$\frac{1}{1}$	×	$\frac{240}{58}$	×	$\frac{1}{40}$	×	$\frac{37}{633}$	×	$\frac{60}{1}$	×	$\frac{26}{-}$ Flor.			= 12,57	28,057
Paris,.....	$\frac{1}{1}$	×	$\frac{240}{58}$	×	$\frac{1}{40}$	×	$\frac{37}{32,154}$	×	$\frac{218,89}{100}$	×	$\frac{103}{-}$			= 26,83	15,113
	Piastre.		Reals.		Mks.		Mks fine.		Oz. st.		Pence.				
Cadiz,.....	$\frac{1}{1}$	×	$\frac{8}{104}$	×	$\frac{1}{5}$	×	$\frac{37}{37}$	×	$\frac{40}{1}$	×	$\frac{58}{-}$			= 37,72	64,000
	Milrec.		Rees.		Oz.		Oz. fine.		Oz. st.		Pence.				
Lisbon,.....	$\frac{1}{1}$	×	$\frac{1000}{990}$	×	$\frac{1}{64}$	×	$\frac{59}{37}$	×	$\frac{40}{1}$	×	58			= 58,38	996,621
	Pezza.		Lire.		Oz. Leg.		Oz. Tr.		Oz. st.		Pence.				
Leghorn,....	$\frac{1}{1}$	×	$\frac{5\frac{1}{4}}{84}$	×	$\frac{12}{144}$	×	$\frac{131}{37}$	×	$\frac{40}{1}$	×	58			= 46,85	67,860

There are three variable numbers in each of the foregoing statements; viz., the price of Foreign Bullion, the London Price, and the Course of Exchange. Now, it is obvious that if any two of these prices be given, the third may thence be found by the help of the Fixed Number. Suppose, for example, in the last statement respecting Paris, that $F =$ the Fixed Number, $p =$ the Paris price, $l =$ the London price, and $c =$ the Course of Exchange, then c, l, or p, may be found, the rest being known. Thus

$$c = \frac{Fp}{l} = \frac{15{,}113 \times 103}{58} = 26{,}83 \text{ Francs for the £ 1 sterling.}$$

$$l = \frac{Fp}{c} = \frac{15{,}113 \times 103}{26{,}83} = 58 \text{ Pence per Ounce sterling.}$$

$$p = \frac{c\,l}{F} = \frac{26{,}83 \times 58}{15{,}113} = 103 \text{ Francs per Kilogramme fine.}$$

The above Equations will answer for all other places to which London gives the certain, (see p. 13, vol. ii.) but where it gives the uncertain, as to Cadiz, the following will be the Formulæ, supposing s to represent the Spanish or Cadiz price.

$$c = \frac{Fl}{s} = \frac{64 \times 58}{104} = 37{,}72 \text{ Pence per Piastre.}$$

$$s = \frac{Fl}{c} = \frac{64 \times 58}{37{,}72} = 104 \text{ Reals per Mark.}$$

$$l = \frac{s\,c}{F} = \frac{104 \times 37{,}72}{64} = 58 \text{ Pence per Ounce.}$$

These Formulæ will apply to operations in Gold as well as Silver, always reckoning the prices in the denominations here laid down; and where the calculations are laborious Logarithms may be introduced with advantage, but, in ordinary cases, common numbers seem more convenient and intelligible.

When speculations are made in Coins, the readiest method is to find their pure contents from the Table of Assays in the present Volume, p. 157.

ERRATA.—(Vol. II.)

Page xii. lines 17 and 20, for 35*s.* Flemish, read 10½ Florins, and for 12*d.* Flemish, read 40*d.* Flemish.

47, line 5, for 3 Pfenings, read 18.

49, Francfort Exchange, for 75, &c. read 3 per cent. which is an agio or discount in comparing 23 Florins with 60 Livres.

75, column 1, line 10, after 34, insert × 2,312.

95, line 9, for 30,467, read 20,467.

Page 142, line 25, for 62 Pence, read 93½.

142, line 26, for 40 Ounces standard, read 12; and for 37 Ounces fine Silver, read 11 Ounces fine Gold.

143, line 12, for 73 Centimes, read 75.

222, Florence, for 339,542, read 339,510.

226, Milan, for 594,530, read 59,453; and for 665,874, read 66,587.

282, Salonica Killow, for 1184 Cubic Inches, read 11840.

N.B. It is recommended that the above Errors be corrected with the Pen before the Work is consulted on any Question of Business.

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EXCHANGE.

EXCHANGE is the act of paying or receiving the money of one country for its equivalent in the money of another country, by means of Bills of Exchange. This operation, therefore, comprehends both the reduction of monies and the negotiation of bills; it determines the comparative value of the currencies of all nations; and shows how foreign debts are discharged, loans and subsidies paid, and other remittances made from one country to another, without the risk, trouble, or expense of transporting specie or bullion. Exchange.

The subject is here considered under the four following heads:—

1.—*Bills of Exchange;* with customs, laws, and regulations relating to the same.

2.—*Principles of Exchange;* comprehending the *Par of Exchange*, with various views of the subject; and the *Course of Exchange*, with the common causes of its fluctuation.

3.—*Monies of Exchange;* with the quotations explained, and rules and examples of calculation.

4.—*Arbitration of Exchange;* with rules and examples for negotiating bills to the greatest advantage: also operations in specie, bullion, and merchandize.

1.—BILLS OF EXCHANGE.

A BILL of Exchange is a written order for the payment of a certain sum of money at an appointed time. It is a mercantile contract, in which four persons are mostly concerned, *viz.* Bills of Exchange.

1.—The *Drawer*, who receives the value, and is also called the *Maker* and *Seller* of the Bill.

Bills of Exchange.

2.—His debtor in a distant place, upon whom the Bill is drawn, and who is called the *Drawee*. He also is called the *Acceptor*, when he accepts the Bill, which is an engagement to pay it when due.

3.—The person who gives value for the Bill, who is called the *Buyer*, *Taker*, and *Remitter*.

4.—The person to whom it is ordered to be paid, who is called the *Payee*, and who may, by indorsement, pass it to any other person.

Most mercantile payments are made in Bills of Exchange, which generally pass from hand to hand, until due, like any other circulating medium; and the person who at any time has a Bill in his possession, is called the *Holder*.

When the Holder of a Bill disposes of it, he writes his name on the back, which is called *Indorsing*; and the Payee should be the first Indorser. If the Bill be indorsed in favour of any particular person, it is called a *Special Indorsement*, and the person to whom it is thus made payable is called the *Indorsee*, who must also indorse the Bill if he negotiates it. Any person may indorse a Bill, and every Indorser (as well as the Acceptor or Payee) is a security for the Bill, and may therefore be sued for payment.

The *Term* of a Bill varies, according to the agreement between the parties, or the custom of countries. Some Bills are drawn at sight; others at a certain number of days or months after sight or after date; and some at *Usance*, which is the customary or usual term between different places.

Days of Grace are a certain number of days granted to the Acceptor after the term of a Bill is expired. In the British Dominions, three days are allowed.

In reckoning when a Bill, payable after *date*, becomes due, the day on which it is dated is not included; and if it be a Bill payable after *sight*, the day of presentment is not included. When the term is expressed in months, calendar months are understood; and when a month is longer than the succeeding, it is a rule not to go, in the computation, into a third month. Thus, if a Bill be dated the 28th, 29th, 30th, or 31st of January, and payable one month after date, the term equally expires on the last day of February, to which the days of grace must, of course, be added; and, therefore, the Bill becomes due on the 3d of March.

No Bill of Exchange drawn in Great Britain or Ireland can be negotiated, presented for payment, or in any way admitted as good in these countries, that is not written on a proper stamp; and any person drawing, accepting, or paying such a Bill, is liable to a penalty.

LAWS OF EXCHANGE.

The following Laws have been selected from the first legal authorities, and likewise examined and approved by several experienced Merchants, Bankers, and Notaries; and though these Laws apply chiefly to the British Dominions, yet they do not differ essentially from the regulations of other commercial Countries, with respect to ACCEPTING, INDORSING, PAYING, PROTESTING, *and* RECOVERING BILLS.

ACCEPTING BILLS.

Accepting Bills.

WHEN a Bill is presented for acceptance, it is generally left until the next day; and the common way of accepting is for the Drawee to write his name at the bottom or across the body of the Bill, with the word *accepted*. An acceptance, however, in a slighter way, has been heretofore deemed binding; thus had the Drawee written his name upon any part of the Bill, or the initials of his name, or the day of the month, or merely the word *accepted*, he was considered liable; but by an Act of Parliament passed in 1819, it was declared, "that no person shall be bound or charged as Acceptor of an Inland or Foreign Bill of Exchange, otherwise than by an acceptance of such Bill of Exchange written thereon or on some one part of such Bill, if the same shall consist of more than one part."

When two or more persons are in partnership, the acceptance of one binds all the others, if the Bill concerns their joint trade; but if it should be made known to the person who receives the Bill that it concerns the Acceptor only in a distinct interest, he alone, as Acceptor, can be sued.

A clerk, or servant, may accept a Bill for his master, when he has authority for that purpose, or if he usually transacts business of this nature for him; and his acceptance binds the master.

But if the Bill be drawn nominally on the servant, directing him to place it to the account of his master, and if the servant should accept it generally, without specifying that he does it for his master's account, the acceptance binds the servant only, and not his employer.

Accepting Bills.

When a Bill is drawn for the account of a third person, and is accepted as such, and he fails without making provision for its payment, the Acceptor must discharge the Bill, and can have no recourse against the Drawer.

A Bill may be accepted to be paid at a longer period than is mentioned in the Bill, or to pay a part of the sum only: such an acceptance is binding on him who makes it; but the Holder is at liberty to take it as it is offered, or to act as if acceptance had been entirely refused.

The acceptance may direct payment to be made at a place different from that mentioned in the Bill, as at the house of a banker; in which case, if the Holder should neglect to demand payment within a reasonable time, and the banker should afterwards fail, the Holder must sustain the loss.

When a Bill has been once accepted, the acceptance cannot be revoked, though the Drawer should be found to have failed before the date of the acceptance.

INDORSING BILLS.

Indorsing Bills.

Bills payable to bearer are transferred by simple delivery, and without any indorsement; but, in order to transfer a Bill payable to order, the Holder must express his order of paying to another person, which is always done by an indorsement.

An indorsement may be blank or special. A *blank indorsement* consists only of the Indorser's name, and the Bill then becomes transferable by simple delivery; a *special indorsement* orders the money to be paid to some particular person, or to his order: a blank indorsement may always be filled up with any person's name, so as to make it special.

An indorsement may take place at any time after the Bill is issued, even after the day of payment is elapsed.

A person who receives a Bill with a blank indorsement may take it as Indorsee, negotiate it again, or demand payment on his own account, or he may receive the money as agent, or for the account of the Indorser; and the latter, notwithstanding his indorsement, may still appear as Holder in an action against the Drawer or Acceptor.

A special indorsement needs not contain the words, *to order*, and the Bill is negotiable; it may also be restrictive, giving authority to the Indorsee to receive the money for the Indorser, but not transfer the Bill again to another.

Indorsing Bills.

An indorsement for part of the money only is not valid, except with regard to him who makes it: the Drawer and Acceptor are not bound by it.

When the Holder of a Bill dies, his Executors may indorse it; but, by so doing, they become answerable to their Indorsee personally, and not as Executors.

PAYING BILLS.

Paying Bills.

Bills should be presented for payment, as well as for acceptance, during the usual hours of business, which are generally considered to be from nine o'clock in the morning till six in the evening. The common mode of payment among merchants is by a draft on a banker for the exact amount of the Bill, and signed by the Drawee; but any paper whatever may be refused, except Bank of England notes; and the Bank receives no other.

PROTESTING BILLS.

Protesting Bills.

When acceptance or payment has been refused, the Holder of the Bill should give regular and immediate notice to all the parties, to whom he intends to resort for payment; and if, on account of unnecessary delay, a loss should be incurred by the failure of any of the parties, the Holder must bear the loss.

With respect to the manner in which notices of non-acceptance or non-payment are to be given, a difference exists between Inland and Foreign Bills.

For Foreign Bills, a Protest is indispensably necessary: thus a Public Notary is to appear with the Bill, and to demand either acceptance or payment; and on being refused, he is to draw up an instrument, called a Protest, expressing that acceptance or payment has been demanded and refused, and that the Holder of the Bill intends to recover any damages which he may sustain in consequence. This instrument is admitted, in foreign countries, as a legal proof of the fact.

The Protest on a Foreign Bill should be made in time to be sent off on the next post-day to the place where it was drawn or negotiated; and if it be for non-payment, the Bill must be sent with the Protest.

As to Inland Bills, a Protest is not absolutely necessary to entitle the Holder to recover the amount of the Bill from the Drawer or Indorsee: it is sufficient that he give notice, by letter or otherwise, that acceptance or payment has been refused, and that he does not mean to give credit to the Drawee.

Protesting Bills.

According to the practice of the London merchants, a Protest is hardly ever made for non-acceptance of an Inland Bill; it is only noted, and, if not paid when it becomes due, it is then protested for non-payment. Notice, however, must be given of the non-acceptance and noting, otherwise the Holder takes the risk upon himself: and if the Protest for non-payment should be omitted, the Holder cannot recover either damages or interest, but merely the amount of the Bill.

If the person who is to accept has absconded, or cannot be found at the place mentioned in the Bill, Protest is to be made in the same manner as if acceptance had been refused.

When an original Bill is lost, and another cannot be had of the Drawer, a Protest may be made on a copy; but if a Bill left for acceptance be lost, the person with whom it was left must bind himself to payment, or else a Protest may be made out immediately.

It is customary, as a precaution against accident or miscarriage, to draw three copies of a Foreign Bill, and to send them by different posts. They are denominated the *First*, *Second*, and *Third of Exchange;* and when any one of them is paid, the rest become void and of no value.

When the Acceptor of a Bill becomes insolvent, or absconds before the term of payment is expired, the Holder may cause a Notary to demand better security, and, on that being refused, to Protest the Bill for want of it. In such cases, however, the most general practice is to wait the regular time till the Bill becomes due.

The damages incurred by non-acceptance and non-payment, besides interest, consist usually of the exchange, re-exchange, commission, and postage, together with the expenses of protest and interest. The exchange is reckoned according to the course at sight, from the place where the Protest is made to the place where the Bill is to be paid by the Drawer; and if it be not paid there, the re-exchange is then reckoned from the same place to that where the Bill is paid, and also double commission. The interest commences from the day when the demand was made.

After a Bill has been protested, it is sometimes accepted by a third person, to save the reputation of the Drawer, or of an Indorser; such an acceptance is called an acceptance *Supra Protest*. The Acceptor then must appear in person, with witnesses, before a Notary, and declare that he accepts it for the honour of such a person, and subscribe the Bill thus—Accepted, *Supra Protest*, in honour of, &c.

Protesting Bills.

The same may happen when the person on whom a Bill is drawn having doubts about the Drawer, protests it, but afterwards accepts it for the honour of one of the Indorsers; in this case the Protest must be sent to the said Indorser without delay.

The person for whose honour a Bill was accepted, must reimburse the Acceptor the amount of the Bill, commission, and other charges, even though the acceptance should have taken place without his knowledge. If such a person approves of the acceptance, the Bill may be paid without any further Protest; but if he should return no answer, or express his disapprobation of the acceptance, the Bill must be formally protested for non-payment against him to whom the Bill was directed; and, on his persisting to refuse payment, the Acceptor may safely pay it for his account, as he can recover the amount.

RECOVERING BILLS.

Recovering Bills.

The Drawer, Acceptor, and every Indorser of a Bill, are equally liable to the payment of it; and though the Holder can have but one satisfaction, yet, until such satisfaction is actually had, he may sue any of them, or all of them, either at the same time or in succession, and obtain judgment against them all, till satisfaction be made. Proceedings cannot be staid in any action, but on payment of the debt and of the costs, not only in that action, but in all the others in which judgment has not been obtained; and though the principal sum should be paid by one of the parties, still costs may be recovered in the several actions against the others.

When acceptance is refused, and the Bill is returned by protest, an action may be commenced immediately against the Drawer, though the regular time of payment be not arrived. His debt, in such a case, is considered as contracted the moment the Bill is drawn: thus, if before the Bill is returned, the Drawer should become a bankrupt, the debt was contracted before the commission of bankruptcy took place.

Nothing will discharge an Indorser from his engagement but the absolute payment of the money; not even a judgment recovered against the Drawer or any previous Indorser, or an execution against any of them, unless the money be paid in consequence.

The Holder of a Bill, in order to entitle himself to recover against an Indorser,

Recovering Bills.

needs not show that he has made a previous attempt to recover from the Drawer; and this holds good with regard to Inland as well as Foreign Bills.

If any Bill happens to be lost within the time limited for payment, the Drawer is to give another of the same tenor with the first; the person, however, to whom this new Bill is delivered, must give security to indemnify the Drawer against all persons whatsoever, in case the lost Bill should be found.

When a person has indorsed a Bill, and it is re-indorsed to him, he cannot maintain an action against the person to whom he indorsed it.

He that has accepted and duly paid a Bill, without having in his hands any effects of the Drawer, may recover in an action for money paid and laid out for the use of the Drawer.

In an action against the Acceptor of a Bill, it is a general rule that the Drawer's hand-writing is admitted, because the Acceptor is always supposed to be acquainted with the hand-writing of the person whose Bill he accepts. But if the same Bill has been indorsed, the hand-writing of the Indorser or Indorsers must be proved; in case of a blank indorsement, however, the hand-writing of the first Indorser is sufficient. The same takes place in an action by an Indorser against the Drawer.

Proof of the signature of a servant is sufficient to bind the master, when it is proved that the servant has authority to draw, accept, or indorse Bills in his master's name; and a subsequent assent is considered as evidence of such authority. A general custom of the servant's signature and the payment of the master is likewise a sufficient proof of a general authority; and this will continue to bind the master until his determination to the contrary can be generally known.

PROMISSORY NOTES.

Promissory Notes.

Promissory Notes are, in general, considered in the same light as Inland Bills of Exchange: the resemblance between them is greatest when a Promissory Note is indorsed; for such an indorsement is an order to the maker of the Note to pay the sum mentioned in it to a third person. Thus the first Indorser of the Note corresponds to the Drawer of the Bill, and the Maker to the Acceptor; and in that sense all the laws relating to Bills of Exchange may be applied to Promissory Notes; and they have the same allowance of three days' grace for payment.

When the form of a Bill or Promissory Note is incontestably good, the law is the same for both; yet a Note may be valid in some cases, when a Bill of Exchange is not so: thus a Promissory Note can be made payable out of a particular fund then within the power of the Drawer; neither is it necessary that the time of payment of a Note should be absolutely fixed: thus, Notes have been held to be good which were payable at a certain person's death, or after such a ship should be paid off; in short, at the period of an event physically or morally certain; but should the payment depend on a contingency which may never happen, as if it were payable when such a person should marry, the Note cannot be accounted good. Promissory Notes.

BONDS.

A Bond for money is a higher security than a Bill of Exchange or a Promissory Note, as it binds the giver, his heirs and lands, in the first instance; whereas Bills and Notes attach only on personals; and, in case of death, a Bond, as a specialty under seal, is paid before simple contract debts, which Bills and Notes are considered to be. Bonds.

A Bond may be transferred by a deed of assignment, but not by indorsement, and therefore it is not deemed a negotiable security, like a Bill of Exchange or a Promissory Note. In foreign countries, however, Bills of Exchange only are binding, as before noticed.

BILLS, BONDS, AND NOTES, HOW VOID.

It should be observed that the foregoing laws apply only to debts legally contracted. For no Bill, Note, or Bond, made by a bankrupt, or by an insane person, can be valid; neither by a minor, nor a married woman, except in a few particular cases. Neither is any Bill, Note, or Bond binding when the whole or any part of the consideration shall be for money, or other valuable thing, won by gaming or betting, or lent knowingly for such purposes; or for money lent on usury; that is, at more than the legal interest, which is 5 per cent. per annum. Bills &c. how void.

DRAFTS ON BANKERS.

Drafts on Bankers.

DRAFTS or Checks on Bankers are generally received by merchants as ready cash; and if the party receiving them should not, within a reasonable time, demand payment, he must bear the loss in case the Banker or Drawer should fail in the interim: but what shall be deemed a reasonable time has not been precisely fixed, as it must depend on situation; and, therefore, whenever it becomes a question of law, it is left to the jury, or court, to decide according to the circumstances of the case. The general practice is, to present Checks for payment on the day they are received or dated, and during the hours of banking business, which are from nine o'clock in the morning to five in the afternoon.

If a Check on a Banker be refused payment, he who gave it is bound to make it good; and if it be lost, he must also make it good, on receiving a satisfactory security that the lost Draft will not appear against him.

As a precaution against loss, it is customary to write across a Draft, as soon as received, the Firm of the House into which it is to be paid; by which may be understood that it will not be paid to any other house or person without proper inquiry. This practice is also useful in Clearing.

Clearing.

CLEARING is a method adopted by London Bankers for exchanging Drafts and Bills on each other's houses as they become due and settling the differences. This important operation is performed daily at an office, called the Clearing-House, with great correctness and despatch, and with such method that Bills and Drafts to the amount of £5,000,000 on an average are cancelled at each Clearing, with less than one-twentieth part of that sum in Bank of England Notes.

Clearing, though of modern adoption in England, has been long practised in other countries, particularly in settling Bills of Exchange and other Documents of Credit, at the great Fairs on the Continent. The invention of this method is ascribed to the Florentines, but the practice has been greatly improved by the London Bankers.

II.—PRINCIPLES OF EXCHANGE.

INLAND EXCHANGE.

Inland Exchange.

By Inland Exchange is understood the act of remitting Bills to places in the same country; by which means debts are discharged more conveniently than by cash remittances.

Suppose, for example, *A.* of London is creditor to *B.* of Edinburgh £100, and *C.* of London debtor to *D.* of Edinburgh £100, both these debts may be discharged by means of one Bill. Thus *A.* draws for this sum on *B.*, and sells his Bill to *C.*, who remits it to *D.*, and the latter receives the amount when due from *B.*—Here, by a transfer of claims, the London debtor pays the London creditor, and the Edinburgh debtor the Edinburgh creditor, and no money is sent from one place to the other. The same would take place if *D.* of Edinburgh drew on *C.* of London, and sold his Bill to *B.* of Edinburgh, who should send it to *A.* of London; the effect, in either case, being merely a transfer of debtors and creditors.*

By the foregoing example, it appears that reciprocal and equal debts, due between two places, may be discharged without remitting specie; and it may be supposed that such an operation is of equal convenience to all parties concerned: but when the debts are unequal, the advantage must be different, as the obligation of remittance is no longer mutual, because the debtor place must pay its balance either by sending Cash or Bills; and as the latter mode is generally preferred, an increased demand for Bills must be the consequence, which enhances their price, as it would that of any other article of sale or purchase.

This is the plain principle of Exchange, and is constantly exemplified in the premium paid for Inland Bills on London, which is the grand emporium of

* In this operation, *A.* is the *Drawer* and *Seller*, *B.* the *Drawee* and *Acceptor*, *C.* the *Buyer* and *Remitter*, and *D.* the *Payee*, if his name be mentioned in the Bill, and he is the Holder when he receives the Bill from *A.*—When *D.*, or any other Holder, presents the Bill for acceptance or payment, he is called the *Presenter*.

Inland Exchange.

commerce that furnishes most other places in the kingdom with foreign merchandize; and being also the seat of Government, to which the revenue is transmitted, and the residence of numerous landlords, whose rents must be remitted to them from the country, it has generally a large balance of debt in its favour; and as this Balance is usually paid in Bills, a demand for them is created, and therefore a premium is the consequence.

The premium on Inland Bills is mostly commuted for time; that is, for a certain number of days after date or after sight, which varies according to circumstances. Thus, the general term for Bills from Edinburgh on London is 40 days' date, which is valued at about $\frac{1}{2}$ per cent., and is called the *Par Date.* A similar premium or date is allowed for Bills on London drawn in all other distant parts of Great Britain; but Bills, at sight, on any of those places, may be generally had in London without any premium. Thus, the Inland Exchange is constantly in favour of the capital; and the date or term varies according to the greater or less demand for Bills.

FOREIGN EXCHANGE.

Foreign Exchange.

The principle of Foreign Exchange is the same as that of Inland, with respect to settling accounts by a transfer of claims, and also by the premium or price of Bills being regulated by the proportion which exists between the demand and supply; but the manner of paying the premium for Foreign Bills differs, and the operation is more complex, owing to the denominations of money not being the same: for, in this case, the value of Bills is estimated by the comparative rate of monies; and the date is, besides, taken into consideration.

In Foreign Exchange, one place always gives another a fixed sum or piece of money for a variable price; the former is called the *certain price,* and the latter the *uncertain price.* Thus, London is said to give to Paris the *certain* for the *uncertain,* that is, the Pound sterling for a variable number of Francs; and to Spain the *uncertain* for the *certain,* that is a variable number of Pence sterling for the Dollar of Exchange. The uncertain price, as quoted at any time, is called the *Rate, or Course of Exchange.*

When the demand in London for Bills on Paris is great, a smaller number of

Francs is given for the Pound sterling, and the contrary; and when there is a demand for Bills on Spain, a greater number of Pence sterling must be given for the Dollar, and the contrary. Foreign Exchange.

Again, if the Course of Exchange between London and Paris be 24 Francs for the Pound sterling, and if this number of Francs contains the same quantity of pure silver as 20 Shillings sterling, then the Exchange is considered *at par*; but if Paris should give a higher price, the Exchange is said to be against France, and in favour of England. This is the general mode of judging whether the Exchange is favourable or unfavourable, though it is not always that on which Merchants act or speculate. But before any further explanation is given of the *Course of Exchange*, or the causes of its fluctuations, it may be necessary to state more fully what is to be understood by the *Par of Exchange*, a subject on which there has been much difference of opinion.

PAR OF EXCHANGE.

The Par of Exchange may be considered under two general heads, viz. the *Intrinsic Par* and the *Commercial Par*, each of which admits of subordinate divisions and distinctions. Par of Exchange.

The *Intrinsic Par* is the value of the money of one country compared with that of another, with respect both to weight and fineness.

The *Commercial Par* is the comparative value of the monies of different countries, according to the weight, fineness, and market prices of the metals.

Thus two sums of different countries are *intrinsically* at par, when they *contain* an equal quantity of the same kind of pure metal; and two sums of different countries are *commercially* at par, when they can *purchase* an equal quantity of the same kind of pure metal.

This latter equivalence is variously denominated. It has been called by different authors the *Current*, the *Momentary*, the *Rational*, and the *Eventual Par;* and though each of these terms seems to convey a correct idea of its fluctuating and ephemeral nature, yet the word *Commercial* is here adopted as being equally appropriate, and, perhaps, more generally understood.

Par of Exchange.

There are other Pars occasionally noticed by Merchants, such as the *Nominal* or *Estimate Par*, which, though not accurate, is commonly referred to; the *Monetary Par*, in which the current value fixed by authority is considered; the *Proportional Par*, which is the equality of two sums of different countries, compared with the rate of Exchange of a third place, and which is also called the *Arbitrated Price* and the *Political Par*. There is, besides, a *Medium Par* sometimes reckoned: that is, a mean taken between the Pars of Gold and Silver Coins.

The intrinsic Par of Exchange is, in effect, the Par of Coins or the Metallic Par; for though the Monies of Exchange are, for the most part, imaginary, their value is ascertained by that of the Coins which they represent, or to which they have a known relation or established proportion.

An approximate or average Par, may, however, be computed from the relative proportions between Gold and Silver, as taken from the Mint regulations of the places in question; and it may be further observed, that the Mint proportions are considered the best constituted when deduced from the market prices of the precious metals, taken from an average of several years.

Here the important question comes to be considered, "Whether the Par of Exchange should be computed from gold or from silver coins?" Messrs. Locke, Harris, and other Authors of the last century, agree, that "the equality of Silver expressed by different denominations of coins should constitute the Par of Exchange between any two countries;" but Lord Liverpool, in his "*Treatise on the Coins of the Realm*," maintains, that the proper measure of value should be of that metal in which the principal payments are made, and, therefore that in some countries the Par should be computed from Gold, and in others from Silver, according to the kind of Money in which Bills of Exchange are paid. In England, however, Gold has been made the standard of value, by a law of 1816, which enacts that no payment in Silver above two pounds is a legal tender.

A difference of opinion has also existed as to the correctness of establishing a Par between Gold Coins and Silver Coins, as these two metals are liable to continual fluctuation in their relative prices. It is, however, obvious, that the intrinsic Par of Exchange can be determined only between places which pay their Bills in the same kind of metal It should be even remarked, that the value of

the same metal differs considerably in different countries, which must be always the case between two places, where one possesses mines, and supplies the other with materials of coinage, as between Spain and France, or between Portugal and England. The difference in such cases is estimated, in ordinary times, according to the expenses of transporting the precious metals; and, thus, from the intrinsic Par and the various charges and prices, the commercial equivalence is computed. Par of Exchange.

In determining the Intrinsic Par of Exchange, another question occurs; namely, Whether the computation should be made from *Mint regulations* or from *Assays?* The objection to the first is, that all Mints do not keep strictly to their own laws; and to the second, that there can be no assurance that the Coins to be assayed are proper average specimens. The latter is, perhaps, the least objectionable, and therefore a calculation from accredited Assays is generally preferred. In the present work, the computations are made according to both methods.

COURSE OF EXCHANGE.

The Course of Exchange is the variable price of the money of one country, which is given for a fixed sum of the money of another country; the latter is called the *certain*, and the former the *uncertain* price, as before stated. Course of Exchange.

When London Merchants want to draw or remit Foreign Bills, they meet upon the Royal Exchange, where this kind of business must be transacted. They are distinguished into two classes, called *Drawers* and *Remitters;* the former are also called *Sellers* of Bills and the latter *Buyers* or *Takers*, and like buyers and sellers of all other articles, their interests are opposite. The market is constantly attended by Exchange-Brokers, who generally bring the parties together and settle the price of Exchange for the day, when they have learnt how the market stands with respect to the wants or offers of Buyers and Sellers. It should be observed that the prices of Bullion and Exchange reciprocally determine or at least influence each other.

When the market price of foreign bills is above par, the Exchange is said to

Course of Exchange.

be favourable to the place that gives the certain for the uncertain, and the contrary; thus, if the par between London and Hamburgh be computed at 35 Shillings Flemish for 1 Pound Sterling, and the Course of Exchange is at 36 Shillings, the Exchange is said to be in favour of London, and against Hamburgh; and the contrary, of course, takes place if the price be under par.

It should, however, be recollected, that when the Exchange is favourable to a place, it is only so to the Buyers and Remitters of Bills, but it is unfavourable to the Drawers and Sellers.

Thus the interest of the Remitter is identified with that of the place where he purchases the bill, and the interest of the Drawer with that of the place where his funds are established and on which he draws.

It is natural to inquire why such prices are considered favourable or unfavourable, if the Drawers and Remitters, whose interests are opposite, are natives of the same country? The usual answer is, that when the Exchange is against a place, it becomes the interest of Remitters to pay their foreign debts in specie or bullion instead of bills, and the exportation of the precious metals is often considered a national disadvantage.

The fluctuations of Exchange are occasioned by various circumstances, both political and commercial. The principal cause is generally stated to be the Balance of Trade: that is, the difference between the commercial exports and imports of any one country with respect to another. Experience, however, shows that the Exchange may be unfavourable to a country when the Balance of Trade is greatly in its favour; for the demand for Bills must chiefly depend on the Balance of such debts as come into immediate liquidation: that is to say, on the *Balance of Payments*.

Besides, it does not follow that large exports are always successful, or quick in their returns; and even should it be the case, the Balance of Payments may be still unfavourable from political causes: such as foreign Loans, Subsidies, Expeditions, or Colonial Establishments. Rich countries are often liable to have the Exchange turned against them, by the sums which they may have to remit to less opulent states on account of their importations of luxuries.

When any alteration takes place in the Coin or Currency of a Country, the Exchange will of course vary, so as to keep pace or correspond with such alteration. This, however, cannot be considered a change in the price of Bills, but in the Money in which they are bought or sold. Course of Exchange.

In times of peace, the Course of Exchange seldom remains long unfavourable to any country, at least beyond the expenses that might be incurred by the transportation of the precious metals; for Bullion is considered the universal currency of Merchants, and Exchange gives it circulation, and thus tends to maintain the level of Money throughout the commercial world.

Although an unfavourable Course of Exchange is generally considered a disadvantage to the place where it prevails, yet the opinion is not always well founded, as much depends on the quantity of Bullion or specie which the country may have to spare: and there is another consideration that renders the question sometimes doubtful, which is, that an unfavourable rate of Exchange operates as an encouragement to the exportation of goods, and as a check against the importation; for the exporter can afford to sell the goods cheaper in proportion to the premium which he receives for his bill; while, on the contrary, the discount on bills from abroad operates as a tax or duty on importation. Thus, Exchange has a natural tendency to correct itself, and may be considered, in ordinary times, as vibrating to restore an equilibrium.

An unfavourable Course of Exchange may therefore be corrected either by the exportation of Bullion or the shipment of Goods—and another method sometimes offers by negotiating Bills through several places, but the latter remedy must fail, if the Exchange be universally unfavourable.

From what has been said of the causes, both commercial and political, which produce the fluctuations of Exchange, and which sometimes counteract or balance each other, the following simple conclusion may be drawn:—that Bills rise or fall in their prices like any other saleable articles, according to the proportion that exists between the demand and the supply.

III.—MONIES OF EXCHANGE.

Monies of Exchange.

THE Denominations of Money used in the business of Exchange are for the most part Imaginary Monies of Account, varying in some places from those used in domestic trade, and almost universally differing from the Coins from which they originated; for it may be remarked, that coins, as local or national currencies, are subject to frequent alterations, which are easily effected;—while Monies of Exchange, being more widely established, cannot be altered without great inconvenience to the commercial world, and are therefore mostly continued as originally adopted.

This may be exemplified by the Spanish Piastre or Dollar of Exchange, an Imaginary Money of Account, which was at first a Coin (the *Peso Duro*) of 8 Reals of Old Plate; but in the course of time it was altered to 10, and afterwards to $10\frac{5}{9}$ of the same Reals, while in Foreign Exchanges it has been continued at the original value; and hence it is, that 8 Hard Dollars are worth $10\frac{5}{9}$ Dollars of Exchange.

Most other imaginary monies may be accounted for or traced in a similar way; and as their proportions to real coins are known, their intrinsic value may be thence accurately determined.

The Quotations of Exchange are the Lists of Prices transmitted from one country to another for the advice and government of merchants. In these Lists the figures of the uncertain monies only are given, without stating their denominations, or the certain monies which they purchase: all these omissions are however here supplied. The Places in the Quotations are arranged alphabetically, and the explanations followed by numerous examples of calculation.*

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* The Calculations of Exchange are performed either by the RULE OF THREE or by the CHAIN RULE. By the former method the sum given to be reduced must be the Third Term of the statement, and the Money into which it is to be reduced, the Second. The First Term must, therefore, be of the same denomination as the Third. Thus, if it be required to reduce 100 Francs into English Money, at 25 Francs per Pound Sterling, say,

As 25 Fr. : 1 £ Ster. :: 100 Fr. : £4

In solving such questions by the CHAIN RULE, *the Sum to be reduced must be the first consequent, and the money into which it is to be reduced, the last consequent. The antecedent must, of course, be of the same denomination as the first consequent.* Thus, to reduce 100 Francs at the above price,

100 Francs.
25 Fr. = £1

Then $\frac{100 \times 1}{25} = £4$

LONDON.

MONIES OF EXCHANGE.

Exchanges are computed in Pounds, Shillings, and Pence sterling; and Farthings are also sometimes reckoned.

4 Farthings = 1 Penny; 12 Pence = 1 Shilling; 20 Shillings = 1 Pound sterling.

COURSE OF EXCHANGE, arranged from Lloyd's List. *January* 1, 1820.			EXPLANATION.	
AMSTERDAM	11	16	LONDON receives 11 Florins 16 Stivers	for 1 Pound sterling.
DITTO	38	6	——— receives 38 Shill. 6 Pence Flemish Banco	for 1 Pound sterling.
FRANCE	25	15	——— receives 25 Francs 15 Centimes	for 1 Pound sterling.
FRANCFORT	149		——— receives 149 Batzen	for 1 Pound sterling.
GENOA	44		——— gives 44 Pence sterling	for 1 Pezza Fuori Banco.
GIBRALTAR	30		——— gives 30 Pence sterling	for 1 Current Dollar.
HAMBURGH	36	2	——— receives 36 Shillings 2 Pence Flemish	for 1 Pound sterling.
LEGHORN	51½		——— gives 51½ Pence sterling	for 1 Pezza of 8 Reals.
LISBON	52		——— gives 52 Pence sterling	for 1 Milree, legal money.
MALTA	46		——— gives 46 Pence sterling	for 1 Dollar of Exchange.
NAPLES	39		——— gives 39 Pence sterling	for 1 Ducato di Regno.
PALERMO	116		——— gives 116 Pence sterling	for 1 Ounce.
RIO JANEIRO	56		——— gives 56 Pence sterling	for 1 Milree, effective.
SPAIN	35		——— gives 35 Pence sterling	for 1 Dollar of Exchange.
VENICE	27		——— receives 27 Italian Livres	for 1 Pound sterling.
VIENNA&TRIESTE	10	15	——— receives 10 Florins 15 Creutzers	for 1 Pound sterling.
DUBLIN	10½		——— receives 110½ Pounds Irish	for 100 Pounds British.

[For the usances, days of grace, &c. see LONDON, vol. i.]

LONDON ON AMSTERDAM.

Reduce 2401 Florins 17 Stivers 8 Pennings into English money; exchange at 12 Florins 4 Stivers per £ sterling.

[16 Pennings=1 Stiver, and 20 Stivers=1 Florin.]

	Fl.	St.		£		Flor.	Stiv.	Pen.		£	s.	d.
As	12	4	:	1	::	2401	17	8	:	196	17	6
	20					20						
	244					48037						
	16					16						
	3904					3904)768600(£196 17s. 6d.						
						3904						
						37820 &c.						

AMSTERDAM ON LONDON.

Reduce £196 17s. 6d. sterling into Dutch money; exchange at 12 Florins 4 Stivers current per £ sterling.

	£		Flor.	Stiv.		£	s.	d.		Flor.	Stiv.	Pen.
As	1	:	12	4	::	196	17	6	:	2401	17	8
			20			20						
			244			3937						
						12						
						47250						
						244						
						(2,0						
						24,0)1152900,0(4803,7½						
						2401 Fl. 17 St. 8 Pen.						

EXCHANGE IN FLEMISH BANCO.

Although the old Bank of Amsterdam has been discontinued, yet Exchanges are sometimes transacted in Banco. The following examples, therefore, may be still useful.

Reduce 8792 Flor. 13 Stiv. 14½ Penn. into English money; exchange at 34s. 4½d. Flemish Banco per £ sterling.

	Flemish.			Sterl.		Flor.	Stiv.	Penn.		£	s.	d.
As	34s.	4½d.	:	£1	:	8792	13	14½	:	852	12	6
	12					20						
	412½					175853						
	8					16						
	3300					33,00)28136,62½(£852 12s. 6d.						
						264						
						173						
						165						
						86 &c.						

By the Chain Rule.

8792 Flor. 13 Stiv. 14½ Penn.

1 Florin = 40 Grotes Flemish.
412½ Grotes = 1 Pound sterling.
Result as above.

BANCO REDUCED INTO CURRENCY.

Bank money is reduced into currency by saying as 100 : 100 + the Agio :: Banco to currency. Currency is reduced to Banco by the reverse operation.

When the Exchange is expressed in Flemish Banco the operation is as follows—

Reduce £852 12s. 6d. sterling into Dutch money; exchange at 34s. 4½d. Flemish Banco per £ sterling.

	Sterling.		Flemish.			£	s.	d.		Flor.	Stiv.	Penn.
As	£1	:	34s.	4½d.	::	852	12	6	:	8792	13	14½
			12			20						
			412½			17052						
			8			12						
			3300			204630						
						3300						
						(16						
						24,0)67527900,0(2813662½						
						48						
						195						
						192 &c.						
						2,0)17585,3 14½						
						8792 Fl. 13 St. 14½ Pen.						

By the Chain Rule.

£852 12 6

£1 sterling = 412½ Grotes Flemish.
40 Grotes = 1 Florin.
Result as above.

LONDON ON FRANCE.

Reduce 1305 Francs 95 Centimes into sterling; exchange at 24 Francs 25 Centimes per £ sterling.

[100 Centimes = 1 Franc.]

Francs	£		Francs	£
As 24,25	: 1	::	4305,95	: 177,565
				20
				11,300
				12
				3,6

Ans. £177 11s. 3½d.

FRANCE ON LONDON.

Reduce £177 11s. 3½d. into Francs and Centimes; exchange at 24 Francs 25 Centimes per £ sterling.

11s. 3½d. =,565

£		Francs	Cent.		£		Francs
As 1	:	24	25	::	177,565	:	4305,95

Ans. 4305 Francs 95 Centimes.

LIVRES REDUCED INTO FRANCS.

Exchanges between France and England were formerly transacted by giving about 30 Pence for 1 Ecu of 3 Livres; and of late, Bills have been sometimes drawn in Livres, Sous, and Deniers; in such case, Livres must be reduced to Francs by multiplying by 80 and dividing by 81.

Reduce 16914 Francs 19 Centimes into English money; exchange at 23 Livres 10 Sous per £ sterling.

			Fr.		Liv
As 80	: 81	::	16914,19	:	17125,625.

Liv.	Sous	£		Livres	Sous	Den.		£	s.
As 23	10	: 1	::	17125	12	6	:	728	15
20				20					
470				342512					
12				12					
5640				564,0)411015,0(£728 15s. *Ans.*					
				3948					
				1621 &c.					

By the Chain Rule.

16914 Francs 19 Centimes.

80 Francs = 81 Livres.

23½ Livres = £1 sterling.

Result as above.

FRANCS REDUCED INTO LIVRES.

Reduce £728 15s. into Francs and Centimes; exchange at 23 Livres 10 Sous per £ sterling.

£	Livres	Sous		£	s.		Livres	Sous	Den.
As 1	: 23	10	::	728	15	:	17125	12	6
20	20			20					
20	470			14575					
				470					
				2,0)685025,0					
				2,0)342512,5					
				17125 Livres, 12,5 Sous					
				12					
				6,0 Deniers					
				17125,625 Livres					
				80					
				81)1370050,000(16914 Francs 19 Centimes. *Ans.*					

By the Chain Rule.

£728 15s.

£1 sterling = 23½ Livres.

81 Livres = 80 Francs.

Result as above.

LONDON ON FRANCFORT.

Reduce 8036 Florins 22 Creutzers, Francfort currency, into sterling; exchange at 142½ Batzen per £ sterling.

[4 Creutzers = 1 Batze, 60 Creutzers or 15 Batzen = 1 Florin.]

	Batzen	£		Florins	Creutzers	£	s.	d.
As	142½	: 1	: :	8036	22	: 845	18	8
	4			60				
	570			570)482182(£845 18s. 8d.				
				4560				
				2618 &c.				

By the Chain Rule.

8036 Florins 22 Creutzers.

1 Florin = 15 Batzen.

142½ Batzen. = £1 sterling.

FRANCFORT ON LONDON.

Reduce £845 18s. 8d. into money of Francfort; exchange at 142½ Batzen per £ sterling.

	£	Batzen		£	s.	d.		Florins	Cr.
As	1	: 142½	: :	845	18	8	:	8036	22
		4		20					
		570		16918					
				12					
				203024					
				570					
				24,0)11572368,0(48218,2					
				96					
				197 &c.					

8036 Florins 22 Creut.

LONDON ON GENOA.

Reduce 7346 Lire 11 Soldi 8 Denari into sterling; exchange at 45d. sterling per Pezza of 5¾ Lire fuori Banco.

[To turn Lire into Pezze multiply by 4 and divide by 23.]

	Lire	Sol.	Den. di Lira.
	7346	11	8
			4
	23)29386	6	8(1277 13 4
	23		
	63 &c.		

	Pez.		d.		Pezze	Sol.	Den.		£	s.	d.
Then as	1	:	45	: :	1277	13	4	:	239	11	3
	20				20						
	20				25553						
	12				12						
	240				306640						
					45						
					24,0)13798800,0(57495 (12						
					120						
					179 &c.						
					2,0)479,1 3						
					£239 11s. 3d.						

GENOA ON LONDON.

Reduce £239 11s. 3d. into money of Genoa; exchange at 45d. sterling per Pezza of 5¾ Lire fuori Banco.

	d.	Pez.		£	s.	d.		Pezze	Soldi	Den. di Pez.
As	45	: 1	: :	239	11	3	:	1277	13	4
				20						
				4791						
				12						
				45)57495(1277						
				13 4						

If Lire are required instead of Pezze, say

	d.	Liv.	Sol.		£	s.	d.		Lire	Sol.	Den.
As	45	: 5	15	: :	239	11	3	:	7346	11	8

By the Chain Rule.

£239 11s. 3d.

£1 sterling = 240 Pence.

45 Pence = 1 Pezza.

4 Pezze = 23 Lire.

Result as above.

Genoa exchanges also on London by giving 27 Italian Livres more or less for the £ sterling.

LONDON ON HAMBURGH.

Reduce 1416 Marks 1 Schilling 6 Pfenings Banco into English money; exchange at 35 Shillings 4 Grotes or Pence Flemish Banco per £ sterling.

[12 Pfenings = 1 Shilling, 16 Shillings = 1 Mark.]

	Flemish.		£		Marks.	Schil.	Pfen.	£	s.	d.
As	35s. 4d.	:	1	: :	1416	1	6	: 106	17	6
	12				16					
	424				22657					
	6				12					
	2544				2544)271890(£106 17s. 6d.					
					2544 &c.					

By the Chain Rule.

1416 Mks. 1 Schill. 6 Pfen.
1 Mark = 32 Grotes Flemish.
424 Grotes = £1 sterling.
Result as above.

HAMBURGH ON LONDON.

Reduce £106 17s. 6d. sterling into Hamburgh money; exchange at 35 Shillings 4 Grotes or Pence Flemish Banco per £ sterling.

	Sterling.		Flemish.		£	s.	d.		Marks.	Schil.	Pfen.
As	£1	:	35s. 4d.	: :	106	17	6	:	1416	1	6
			12		20						
			424		2137						
					12						
					25650						
					424						
					24,0)1087560,0(45315d. Fl.				(1416	1	6
					96						

By the Chain Rule.

£106 17s. 6d.
£1 sterling = 424 Grotes Flemish.
32 Grotes = 1 Mark.
Result as above.

LONDON ON LEGHORN.

Reduce 1876 Pezze 12 Soldi 5 Denari into English money; exchange at 50¼d. sterling per Pezza of 8 Reals.

[12 Denari = 1 Soldo, 20 Soldi = 1 Pezza.]

	Pezza	d.		Pezze	Soldi	Den.	£	s.	d.
As	1	: 50¼	: :	1876	12	5	: 392	18	4¼
				20					
				37532					
				12					
				450389					
				50¼					
				240)22632047(94300d. sterl. = £392 18s. 4¼d.					

By the Chain Rule.

1876 Pez. 12 Sol. 5 Den.
1 Pezza = 50¼ Pence.
240 Pence = £1 sterling.
Result as above.

LEGHORN ON LONDON.

Reduce £392 18s. 4¼d. sterling into money of Leghorn; exchange at 50¼d. sterling per Pezza of 8 Reals.

	d.	Pez.		£	s.	d.		Pez.	Sol.	Den.
As	50¼	: 1	: :	392	18	4¼	:	1876	12	5
	4			20						
	201			7858						
				12						
				94300						
				4						
				201)377201(1876				12	5	
				201 &c.						

By the Chain Rule.

£392 18s. 4¼d.
£1 sterling = 240 Pence.
50¼ Pence = 1 Pezza.
Result as above.

LONDON ON LISBON.

Reduce 827 Milrees 160 Rees into English money; exchange at 63⅜d. sterling per Milree.

[1000 Rees = 1 Milree, 400 Rees = 1 Crusado.]

Mil.		d.		Milrees		£	s.	d.
As 1	:	63⅜	: :	827,160	:	218	8	5¼
				63,375				

12)52421,265

2,0)436,8 5¼

£218 8s. 5¼d.

But if the sum be given in Crusados they are reduced to Rees by multiplying them by 400, thus:

Reduce 7650 Crusados into sterling; exchange at 61½d. sterling per Milree.

7650 × 400 = 30600, then—

Milree		d.		Milrees		£	s.	d.
As 1	:	61½	: :	3060	:	784	2	6

LISBON ON LONDON.

Reduce £218 8s. 5¼d. into Portugal money; exchange at 63⅜d. sterling per Milree.

d.		d.		Milree		£	s.	d.		M.	R.
As 63⅜ or 63,375	:	1	: :			218	8	5¼	:	827	160
						20					
						4368					
						12					

63,375)52421,250(827,160 M. R.

But if the answer be required in Crusados, two decimals only should be cut off, and the four first figures should be divided by 4, thus:

4)8271,60 Rees(2067 Crusados 360 Rees.

The exchanges of Rio Janeiro are similar to those of Lisbon; there is however a difference in the value of their monies, as that of Lisbon is half cash and half paper, called legal money, and that of Rio Janeiro is effective.

LONDON ON MALTA.

Reduce £728 13s. 6d. into Tari and Grani of Malta; exchange at 49d. per Dollar of 2½ Scudi, or 30 Tari.

[20 Grani = 1 Tari, and 12 Tari = 1 Scudo.]

d.		Dol.		£	s.	d.		Sc.	Ta.	Gr.
As 49	:	1	: :	728	13	6	:	8922	6	12
		2½		240						
		2½		174882						
				2½						
				Scudi		Tari		Gr.		
				49)437205(8922		6		12		
				392						
				452						
				441						

Rem. × 12 × 20 &c.

MALTA ON LONDON.

Reduce 8922 Scudi 6 Tari 12 Grani into sterling; exchange at 49d. per Dollar.

Dollar		d.		Scudi	Tari	Gr.		£	s.	d.
As 1	:	49	: :	8922	6	12	:	728	13	6
30				12						
30				107070						
20				20						
600				2141412						
				49						
				6,00)1049291,88						
				12)174882						
				2,0)1457,3 6						

£728 13s. 6d.

LONDON ON NAPLES.

Reduce 1014 Ducati 16 Grani di Regno into English money; exchange at 37½d. sterling per Ducato. This is best done by decimals: thus,

[100 Grani=1 Ducato di Regno.]

Duc.		d.			Ducati		£	s.	d.
As 1	:	37½	: :		1014,16	:	158	9	3
					37,5				
					24,0)3803,100(£158,4625				
					24		20		
					140 &c.		9,2500		
							12		
							3,00		

NAPLES ON LONDON.

Reduce £158 9s. 3d. into money of Naples; exchange at 640 Grani per £ sterling.

9s. 3d. = ,4625.

£		Grani			£	s.	d.		Ducati	Grani
As 1	:	640	: :		158	9	3	:	1014	16
240					20					
240					3169					
					12					
					38031					
					640					
					24,0)2433984,0					
					1,00)1014,16					

By Decimals.

9s. 3d. = ,4625.

£		Grani			£		Ducati	Grani
As 1	:	640	: :		158,4625	:	1014	16
					640			
					Duc. 1014,16			

LONDON ON PALERMO.

Reduce 1377 Oncie 14 Grani into English money; exchange at 127d. sterling per Oncia.

[20 Grani=1 Tari, 30 Tari=1 Oncia.]

On.		d.		On.	Tari	Grani		£	s.	d.
As 1	:	127	: :	1377	0	14	:	728	13	6
30				30						
30				41310						
20				20						
600				826214						
				127						
				6,00)1049291,78						
				÷ 12 & 20)174882						
				£728 13 6						

PALERMO ON LONDON.

Reduce £728 13s. 6d. into Sicilian money; exchange at 127d. sterling per Oncia.

d.		On.			£	s.	d.		On.	Tari	Gr.
As 127	:	1	: :		728	13	6	:	1377	0	14
		× 20 & 12									
		127)174882(1377 0 14.									
		127									

Remainder × 30 and 20 ÷ 127 gives the Aus. as above.

LONDON ON SPAIN.

Reduce 2375 Dollars 6 Reals 16 Marav. into English money; exchange at 34d. sterl. per Dollar or Piastre.

[34 Mar. = 1 Real, 8 Reals = 1 Dollar of Ex.]

Dollar		d.		Dollars	Reals	Mar.		£	s.	d.
As 1	:	34	: :	2375	6	16	:	336	11	$5\frac{1}{2}$

8 × 8 × 34

8 = 646220

34 34

272 2584880

1938660

(12

272)21971480(80777½

2176

2,0)673,1 5½

2114

1904 £336 11s. 5½d.

2108 &c.

SPAIN ON LONDON.

Reduce £336 11s. 5½d. sterling into Spanish money; exchange at 34d. sterling per Dollar of Plate, or Piastre.

d.		Dol.		£	s.	d.		Dollars	Reals	Mar.
As 34	:	1	: :	336	11	$5\frac{1}{2}$	:	2375	6	16

20

6731

12

Dol. Reals Mar.

34)80777½(2375 6 16

68 &c.

And the Remainder multiplied by 8 and divided by 34 gives the Ans.

If the result be required in *Vellon*, multiply the *Plate* by 32 and divide by 17, and *vice versâ*.

GIBRALTAR exchanges in current Dollars, and also in Hard Dollars. *See* SPAIN; *also*, GIBRALTAR, vol. i.

LONDON ON VENICE.

Reduce 14783 Lire 3 Soldi 9 Denari piccoli into sterling; exchange at 59 Lire piccole per £ sterling.

[12 Denari=1 Soldo, 20 Soldi=1 Lira.]

Lire		£		Lire	Sol.	Den.		£	s.	d.
As 59	:	1	: :	14783	3	9	:	250	11	3

£ s. d.

59)14783 3 9(250 11 3

The above mode of exchange, as formerly used at Venice, has been of late years discontinued, and French Francs, called *Lire Italiane* or *Italian Livres*, substituted in their place. The proportion is, that $40\frac{5}{10}$ Lire piccole of Venice equal $20\frac{723}{1000}$ Lire Italiane. In business the proportion is mostly taken at 23 Lire 9 Soldi for 12 Italian Livres.—*See the annexed Example.*

VENICE ON LONDON.

Reduce £728 13s. 6d. sterling, into Lire Italiane of Venice; exchange at 24 Lire 80 Centimes per £ sterling.

[Italian Livres and Centimes are reduced to sterling, and the contrary, in the same manner as Francs and Centimes of France, according to the given Course of Exchange.]

£		Lire	Cen.		£	s.	d.		Lire	Cen.
As 1	:	24	80	: :	728	13	6	:	18071	14

To reduce the above Lire Italiane into Lire piccole, say—

Lire It.		Lire Sol. (piccoli)			Lire It.	Cen.		Lire piccole		
As 12	:	23	9	: :	18071	14	:	35314	0	5
20		20			× 469 — 240					
240		469			Result as above.					

LONDON ON VIENNA.

Reduce 6451 Florins 50 Creutzers into English money; exchange at 9 Florins 40 Creutzers per £ sterling.

[4 Pfenings = 1 Creutzer, 60 Creutzers = 1 Florin.]

Fl.	Cr.		£		Fl.	Cr.		£	s.	d.
As 9	40	:	1	: :	6451	50	:	667	8	$7\frac{1}{2}$
60					60					
580					58,0)38711,0(667			8	$7\frac{1}{2}$	
					348					
					391					
					348					
					431					
					406					

25 × 20 and 12 &c.

VIENNA ON LONDON.

Reduce £667 8s. $7\frac{1}{2}$d. into money of Vienna; exchange at 9 Florins 40 Creutzers per £ sterling.

£		Fl.	Cr.		£	s.	d.		Fl.	Cr.
As 1	:	9	40	: :	667	8	$7\frac{1}{2}$	:	6451	50
240		60			20					
240		580			13348					
					12					
					160183,5					
					580					
					24,0)9290640,0(38711,0					
					72 &c.					

6451 Fl. 50 Cr.

The Exchange with TRIESTE is similar to that of Vienna.

LONDON ON DUBLIN.

Reduce £879 6s. 6d. Irish into English money; exchange at $11\frac{5}{8}$; that is, £100 British for £$111\frac{5}{8}$ Irish.

£ Irish.	£ British.	£	s.	d. Irish.	£	s. British.
As $111\frac{5}{8}$	: 100	: : 879	6	6 :	787	15
8	8	800				
893	800	703200				
5s. = $\frac{1}{4}$		200				
1s. = $\frac{1}{5}$		40				
6d. = $\frac{1}{2}$		20				
		893)703460(787	£	15 s.		
		6251 &c.				

By Decimals.

As 111,625 : 100 : : 879,325 : 787,75
20
15,00

DUBLIN ON LONDON.

Reduce £787 15s. English to Irish money; exchange at $11\frac{5}{8}$.

£ British.	£ Irish	£	s. British.	£	s.	d. Irish.
As 100	: $111\frac{5}{8}$: :	787	15 :	879	6	6

Or thus, by Practice:—

£787 15
$11\frac{5}{8}$

	8665	5		£787 15 0
$\frac{4}{8} = \frac{1}{2}$	393	17	6	91 11 6
$\frac{1}{8} = \frac{1}{4}$	98	9	$4\frac{1}{2}$	£879 6 6
	£91,57	11	$10\frac{1}{2}$	
	20			
	11,51			
	12			
	6,22			

By Decimals.

As 100 : 111,625 : : 787,75 : 879,325

AMSTERDAM.

MONIES OF EXCHANGE.

Exchanges are computed in Florins, Stivers, and Pennings; or in Pounds, Shillings, and Pence Flemish.

16 Pennings = 1 Stiver; 20 Stivers = 1 Florin or Guilder. Also 12 Grotes or Pence Flemish, or 6 Stivers = 1 Shilling Flemish; 20 Shillings Flemish, or 6 Florins = 1 Pound Flemish; $2\frac{1}{2}$ Florins, or 50 Stivers = 1 Rixdollar.

COURSE OF EXCHANGE. From the Amsterdam Quotation. *January* 7, 1820.			EXPLANATION.	
ANTWERP	$4\frac{1}{2}$ per cent.	AMSTERDAM receives	$104\frac{1}{2}$ Florins	for 100 Florins of exchange.
BRESLAU	144	receives	144 Rixdollars currency,	for 100 Rixdollars.
FRANCE	55	gives	55 Grotes Flemish	for 3 Francs.
FRANCFORT	$35\frac{3}{8}$	receives	$35\frac{3}{8}$ Stivers	for 1 Rixdollar.
GENOA	86	gives	86 Grotes Flemish	for 1 Pezza of $5\frac{3}{4}$ Lire.
HAMBURGH	34	gives	34 Stivers	for 1 Rixdollar of 2 Marks.
LEGHORN	93	gives	93 Grotes Flemish	for 1 Pezza of 8 Reals.
LISBON	$40\frac{1}{2}$	gives	$40\frac{1}{2}$ Grotes Flemish	for 1 old Crusado.
LONDON	38	gives	38 Shillings	for 1 Pound sterling.
NAPLES	74	gives	74 Grotes	for 1 Ducato di Regno.
SPAIN	95	gives	95 Grotes Flemish	for 1 Ducat of exchange.
VENICE	224	receives	224 Cent. Lire Italiane,	for 1 Florin.
VIENNA	14	gives	14 Stivers	for 1 Rixdollar paper.
DITTO	34	gives	34 Stivers	for 1 Rixdollar current effec.

[For the usances, &c. of bills of exchange, see AMSTERDAM, vol. i.]

AMSTERDAM ON LONDON, see page 20.

AMSTERDAM ON FRANCE.

Reduce 475 Florins 10 Stivers, 12 Pennings into French money; exchange at 54 Grotes Flemish per Ecu of 3 Francs.

	Gr. Flem.		Francs		Florins	Stivers	Pen.		Francs	Cents
As	54	:	3	: :	475	10	12	:	1056	75
	8				20					
	432				9510					
					16					
					152172					
					3					
					432)456516(1056				75	
					432 &c.					

By the Chain Rule.

475 Flor. 10 St. 12 Pen.
1 Florin = 40 Grotes Flemish.
54 Grotes = 3 Francs.

Result as above.

LONDON ON AMSTERDAM, see page 20.

FRANCE ON AMSTERDAM.

Reduce 1056 Francs 75 Centimes into Dutch money; exchange at 54 Grotes Flemish per Ecu of 3 Francs.

	Fr.		Gr. Fl.		Fr.		Fl.	St.	Pen.
As	3	:	54	: :	1056,75	:	475	10	12
					54				
					3)57064,50				
					4,0)1902,150				
					475,5375				
					20				
					10,7500				
					16				
					12,000				

By the Chain Rule.

1056,75 Francs.
3 Francs = 54 Grotes Flemish.
40 Grotes = 1 Florin.

Result as above.

AMSTERDAM ON GENOA.

Reduce 4145 Florins 2 Stivers into money of Genoa; exchange at 84¾ Grotes Flemish per Pezza of 5¾ Lire.

	Grotes		Pezza		Florins	Stivers		Pezze	Soldi	Den.
As	84¾	:	1	: :	4145	2	:	1956	7	9

To reduce Pezze to Lire.

Pezze	Soldi	Den. di Lira
1956	7	9
		23
4)44996	18	3
Ans. 11249	4	7

By the Chain Rule.

4145 Florins 2 Stivers.
1 Florin = 40 Grotes Flemish.
84¾ Grotes = 1 Pezza.
4 Pezze = 23 Lire.

Reduced gives 11249 L. 4 S. 7 D. as above.

GENOA ON AMSTERDAM.

Reduce 11249 Lire 4 Soldi 7 Denari into Dutch money; exchange at 84¾ Grotes Flemish per Pezza of 5¾ Lire.

To reduce Lire to Pezze.

11249	4	7				
		4				
23)44996	18	4(1956	Pez.	7	9	Soldi Den. di Pez.
23 &c. Then						

	Pezza		Grotes		Pezze	Soldi	Den.		Florins	Sti.
As	1	:	84¾	: :	1956	7	9	:	4145	2

By the Chain Rule.

11249 Lire 4 Soldi 7 Den.
23 Lire = 4 Pezze.
1 Pezza = 84¾ Grotes Flemish.
40 Grotes = 1 Florin.

Reduced gives 4145 Fl. 2 St. as above.

AMSTERDAM ON HAMBURGH.

Reduce 3309 Marks 12 Schillings into Dutch money; exchange at $32\frac{7}{8}$ Stivers per Rixdollar of 2 Marks Hamburgh banco.

	Marks		Stivers			Marks	Sch.		Florins	Stivers
As	2	:	$32\frac{7}{8}$	: :		3309	12	:	2720	4
	16					16				
	32					52956				
						$32\frac{7}{8}$				
						(2,0			Fl.	St.
					32)1740928(5440,4 St. =				2720	4
					160 &c.					

By the Chain Rule.

3309 Mks. 12 Sch.
2 Marks = $32\frac{7}{8}$ Stivers.
20 Stivers = 1 Florin.

Result as above.

The exchange of Amsterdam on Hamburgh is sometimes done by giving 120 Marks for so many Florins current, the operation is then as follows:

Reduce 4080 Marks banco into Dutch money; exchange at 106 Florins for 120 Marks Hamburgh.

	Marks		Florins		Marks		Florins
As	120	:	106	: :	4080	:	3604

HAMBURGH ON AMSTERDAM.

Reduce 2720 Florins 4 Stivers into Hamburgh money; exchange at $32\frac{7}{8}$ Stivers per Rixdollar of exchange of 2 Marks banco.

	Stivers		Marks		Florins	Sti.		Marks	Sch.
As	$32\frac{7}{8}$	:	2	: :	2720	4	:	3309	12
	8		8		20				
	263		16		54404				
					16				
							Marks		Sch.
					263)870464(		3309		12
					789 &c.				

By the Chain Rule.

2720 Florins 4 Stivers.
1 Florin = 20 Stivers.
$32\frac{7}{8}$ Stivers = 2 Marks.

Result as above.

The exchange of Hamburgh on Amsterdam is sometimes done at so many Florins current for 120 Marks banco. The operation is then as follows:

Reduce 3604 Florins current into Hamburgh money; exchange at 106 Florins current for 120 Marks Hamburgh banco.

	Florins		Marks		Florins		Marks
As	106	:	120	: :	3604	;	4080

AMSTERDAM ON LEGHORN.

Reduce 9800 Dutch Florins into money of Leghorn; exchange at $87\frac{1}{2}$ Grotes Flemish per Pezza of 8 Reals.

	Gr.		Pezza		Florins		Pezze
As	$87\frac{1}{2}$	:	1	: :	9800	:	4480
	8				20		
	700				196000		
					16		
					7,00)31360,00		
					4480		

By the Chain Rule.

9800 Florins.
1 Florin = 20 Grotes.
$87\frac{1}{2}$ Grotes = 1 Pezza.

Result as above.

LEGHORN ON AMSTERDAM.

Reduce 4480 Pezze of 8 Reals into Dutch money; exchange at $87\frac{1}{2}$ Grotes Flemish per Pezza.

	Pezza		Grotes		Pezze		Florins
As	1	:	$87\frac{1}{2}$	: :	4480	:	9800
					$87\frac{1}{2}$		
					4,0)39200,0 Grotes.		
					9800 Florins.		

By the Chain Rule.

4480 Pezze.
1 Pezza = $87\frac{1}{2}$ Grotes.
20 Grotes = 1 Florin.

Result as above.

AMSTERDAM ON LISBON.

Reduce 557 Mil. 846 Rees into Dutch money; exchange at 46¼ Grotes Flemish per Crusado of 400 Rees.

	Rees	Grotes		Milrees		Florins	Stiv.	Pen.
As	400	: 46¼	::	557,846	:	1612	10	8

46¼

4,00)258003,77

4,0)6450,0944

1612,5236 = Fl. 1612, St. 10, Pen. 8

By the Chain Rule.

557,846 Milrees.
400 Rees = 46¼ Grotes Flemish.
40 Grotes = 1 Florin.
Result as above.

LISBON ON AMSTERDAM.

Reduce 1612 Florins 10 Stivers 8 Pennings into Portugal money; exchange at 46¼ Grotes Flemish per Crusado of 400 Rees.

	Grotes		Rees		Florins	Stiv.	Pen.		Milrees	Rees
As	46¼	:	400	::	1612	10	8	:	557	846

8 ×20×16×400

370 37,0)20640320,0(557,846
185 &c.

By the Chain Rule.

1612 Florins 10 Stivers 8 Pen.
1 Florin = 40 Grotes Flemish.
46¼ Grotes = 400 Rees.
Result as above.

AMSTERDAM ON SPAIN.

Reduce 956 Dollars 6 Reals of Plate into Dutch money; exchange at 94¼ Grotes Flemish per Ducat of plate.

	Mar.		Gr.		Dol.	R.		Fl.	St.
As	375	:	94¼	::	956	6	:	1635	3

×8×34×94¼

(4,0

375)24527243(6540,6 Grotes.
2250

1635,15 Florins.
2027 &c. 20

3,00 Stivers.

By the Chain Rule.

956 Dollars 6 Reals.
1 Dollar = 272 Maravedis.
375 Marav. = 94¼ Grotes.
40 Grotes = 1 Florin.
Result as above.

SPAIN ON AMSTERDAM.

Reduce 1635 Florins 3 Stivers into Spanish money; exchange at 94¼ Grotes Flemish per Ducat of 375 Maravedis of plate.

	Gr.		Mar.		Fl.	St.		Dol.	R.
As	94¼	:	375	::	1635	3	:	956	6

8 ×20×16×375

34 (8

754 754)196218000(260236(7654 Reals.
1508 238

956 D. 6 R.
4541 &c. 222 &c.

By the Chain Rule.

1635 Florins 3 Stivers.
1 Florin = 40 Grotes Flemish.
94¼ Grotes = 375 Maravedis.
272 Marav. = 1 Dollar of Plate.
Result as above.

The Exchanges of ANTWERP are similar to those of Amsterdam, for the Monies of Exchange and Regulations of which, see ANTWERP, vol. i.

AUGSBURG.

MONIES OF EXCHANGE.

Exchanges are computed here in Florins and Creutzers; and also in Rixdollars and Creutzers.

60 Creutzers = 1 Florin or Gulden; 90 Creutzers, or $1\frac{1}{2}$ Florin = 1 Rixdollar of account; 100 Rixdollars Giro, or money of exchange=127 Rixdollars current, or $190\frac{1}{2}$ Florins current; 2 Florins=1 Rixdollar specie.

COURSE OF EXCHANGE, From the Augsburg Quotation. *January*, 1820.				EXPLANATION.	
AMSTERDAM ..	110	.. AUGSBURG	gives	110 Rixdollars Giro	for 100 Rixdollars.
FRANCE	120	.. ———	gives	120 Florins current	for 100 Ecus of 3 Francs.
FRANCFORT ..	102	.. ———	gives	102 Rixdollars current ..	for 100 Rixdollars current.
GENOA.....	62	.. ———	receives	62 Soldi fuori banco	for 1 Florin current.
HAMBURGH....	118	.. ———	gives	118 Rixdollars Giro.....	for 100 Rixdollars banco.
LEGHORN.....	57	.. ———	receives	57 Soldi moneta buona ..	for 1 Florin current.
LEIPSIC	99	.. ———	gives	99 Rixdollars current ..	for 100 Rixdollars of exchange.
LONDON	9 45	.. ———	gives	9 Flor. 45 Creutzers cur.	for £1 sterling.
MILAN.....	67	.. ———	receives	67 Soldi current.....	for 1 Florin current.
NUREMBERG ..	101	.. ———	gives	101 Florins current.....	for 100 Florins current.
VIENNA	106	.. ———	receives	106 Florins	for 100 Florins current.

[For usances and other particulars relating to bills of exchange, see AUGSBURG, vol. i.]

AUGSBURG ON AMSTERDAM.

Reduce 1197 Florins 18 Stivers 5½ Pennings into Augsburg currency; exchange at 112 Rixdollars money of exchange per 100 Rixdollars of Amsterdam, each 2½ Florins.

Rixd.		Rixd. of ex.		Florins	Stivers	Pen.		Florins	Cr. cur.
As 100	:	112	: :	1197	18	5½	:	1022	21
2½				20					
250				23958					
× 20 × 16				16					
				383323,5					
				112					
				8,0000)4293,2232					
				536,6529 Rixdollars.					
				3					
				2)1609,9581					
				804,9798 Florins of exchange.					

805 × 127 ÷ 100 = Florins 1022, Cr. cur. 21

AMSTERDAM ON AUGSBURG.

Reduce 1022 Florins 21 Creutzers, Augsburg currency, into Dutch money; exchange at 112 Rixdollars money of exchange per 100 Rixdollars of Amsterdam.

[127 R. Cur. = 100 R. of Ex.]

Rixd. cur.		Rixd. of ex.		Florins	Cr.		Fl. of ex.
As 127	:	100	: :	1022	21	:	805
							2
							3)1610
							536⅔

Rixd. exch.		Rixd.		Rixd.	Cr.		Florins	St.	P.
And as 112	:	100	: :	536	60	:	1197	18	5½
90		2½		90					
10080		250		48300					
				250					
				1008,0)1207500,0(1197					
				1008					
				1995 &c.					

Remainder × 20 × 16 &c.

AUGSBURG ON FRANCE.

Reduce 2542 Francs 50 Centimes into money of Augsburg; exchange at 124 Rixdollars currency per 100 Ecus of 3 Francs.

Francs		Rixdollars		Francs		Florins	Cr.
As 300	:	124	: :	2542,50	:	1576	21
				124			
				3,00)3152,7000			
				1050,90			
				1½			
				1576,35			
				60			
				21,00			

By the Chain Rule.

2542 Francs 50 Centimes.

300 Francs = 124 Rixdollars.

2 Rixdollars = 3 Florins.

Result as above.

FRANCE ON AUGSBURG.

Reduce 1576 Florins 21 Creutzers, Augsburg currency, into French money; exchange at 124 Rixdollars per 100 Ecus of 3 Francs.

Rixdollars		Francs		Florins	Creutz.		Francs	Centimes
As 124	:	300	: :	1576	21	:	2542	50
90				60				
11160				94581				
				300				
				1116,0)2837430,0(2542,50				
				2232				
				6054 &c.				

By the Chain Rule.

1576 Florins 21 Creutzers.

3 Florins = 2 Rixdollars.

124 Rixdollars = 300 Francs.

Result as above.

AUGSBURG ON GENOA.

Reduce 11616 Lire 19 Soldi 10 Denari fuori banco into money of Augsburg; exchange at 62 Soldi per Florin Augsburg currency.

	Soldi		Florin		Lire	Soldi	Denari		Florins	Cr.
As	62	:	1	: :	11616	19	10	:	3747	25
	12				20					
	744				232339					
					12					
					2788078					

Florins Creutzers

744)2788078)3747 25

2232

5560 &c.

By the Chain Rule.

11616 Lire 19 Sol. 10 Den.

1 Lira = 20 Soldi.

62 Soldi = 1 Florin.

Result as above.

GENOA ON AUGSBURG.

Reduce 3747 Florins 25 Creutzers, Augsburg currency, into money of Genoa; exchange at 62 Soldi fuori banco per Florin.

	Florin		Soldi		Florins	Creutzers		Lire	Sol.	Den.
As	1	:	62	: :	3747	25	:	11616	19	10
					60					
					224845					
					62					
					1394039,0					

6,0)1394039,0

2,0)23233,9 10

11616 Lire 19 Soldi 10 Denari.

By the Chain Rule.

3747 Florins 25 Cr.

1 Florin = 62 Soldi.

20 Soldi = 1 Florin.

Result as above.

AUGSBURG ON HAMBURGH.

Reduce 3546 Marks 6 Schillings 4 Pfenings banco into money of Augsburg; exchange at 144 Rixdollars Augsburg currency per 100 Rixdollars Hamburgh banco.

[60 Creutzers = 1 Florin; 90 Creutzers = 1 Rixdollar of account.]

	Rixd. H.		Rixd. A.		Marks	Sch.	Pf.		Fl.	Cr.
As	100	:	144	: :	3546	6	4	:	2553	24
	3				16					
	300				56742					
	16				12					
	4800				680908					
	12				144					
	57600		57600		98050752					

Rixd. A.

57600)98050752(1702271/2

57600

404507&c. 2553,40

60

24,00

HAMBURGH ON AUGSBURG.

Reduce 2553 Florins 24 Creutzers, Augsburg currency, into Hamburg banco; exchange at 144 Rixdollars of Augsburg per 100 Rixdollars Hamburgh banco.

	Rixd. A.		Rixd. H.		Florins	Cr.		Marks	Sch.	Pf.
As	144	:	100	: :	2553	24	:	3546	6	4
	90				60					
	12960				153204					
					100					
					1532040,0					

Rixd. H.

1296,0)1532040,0(1182 2 1 1/3

1296 3

2360 &c. 3546 6 4

Remainder × 16 × 12 &c.

N.B. The exchanges of Augsburg with LEGHORN are performed on the same principle as the above with Genoa; and those of LONDON with Augsburg are the same as with Vienna, p. 27.

BERLIN AND BRESLAU.

MONIES OF EXCHANGE.

Exchanges are computed here in Rixdollars, good Groschen, and Pfenings, currency.

12 Pfenings = 1 good Grosche; 24 good Groschen = 1 Rixdollar currency, or Rixdollar of account.

COURSE OF EXCHANGE, from the Berlin Quotation. *January*, 1820.		EXPLANATION.
AMSTERDAM 147½	.. BERLIN gives 147½	Rixdollars current for 250 Florins, or 100 Rixd.
AUGSBURG 102	.. ——— gives 102	——— ..... for 100 Rixd. convention money.
FRANCE 79	.. ——— gives 79	——— ..... for 100 Ecus of 3 Francs.
FRANCFORT..... 105	.. ——— gives 105	——— ..... for 100 Rixdollars current.
HAMBURGH, in banco 150	.. ——— gives 150	——— ..... for 100 Rixdollars banco.
KONIGSBERG 100⅔	.. ——— gives 100⅔	——— ..... for 100 Rixdollars current.
LEIPSIC 104	.. ——— gives 104	——— ..... for 100 Rixd. convention money.
LONDON 6 14	.. ——— gives 6	———14Grosc. for 1 Pound sterling.
VIENNA 41	.. ——— gives 41	——— current for 100 Rixdollars current.

[For the usances and other particulars relating to Bills of Exchange, see BERLIN and BRESLAU, vol. i.]

BERLIN ON AMSTERDAM.

Reduce 4656 Florins 5 Stivers into Prussian money; exchange at 146 Rixdollars Prussian currency per 100 Rixdollars of Amsterdam.

Rixd. Dutch.		Rixd. Prussian.		Florins	Stivers		Rixd.	Groschen
As 100	:	146	::	4656	5	:	2719	6
$2\frac{1}{2}$				20				
250				93125				
20				146				
5000		5,000)13596,250						
		2719,25						
		24						
		6,00						

By the Chain Rule.

4656 Florins 5 Stivers.

5 Florins = 2 Rixdollars.
100 Rixdollars = 146 Prussian Rixdollars.

Result as above.

AMSTERDAM ON BERLIN.

Reduce 2719 Rixdollars 6 good Groschen Prussian currency into Dutch money; exchange at 146 Rixdollars Prussian per 100 Rixdollars Dutch.

Rixd. Prussian.		Rixd. Dutch.		Rixd.	Groschen		Florins	Stivers
As 146	:	100	::	2719	6	:	4656	5
24		$2\frac{1}{2}$		24				
3504		250		65262				
				250				
				Florins	Sti.			
				3504)16315500(4656	5			
				14016				
				22995 &c.				

By the Chain Rule.

2719 Rixdollars 6 Groschen.

146 Prussian Rxds. = 100 Rxds. of Amsterdam.
2 Rixdollars = 5 Florins.

Result as above.

BERLIN ON FRANCE.

Reduce 1943 Francs 75 Centimes into Prussian money; exchange at 76 Rixdollars Prussian currency per 100 Ecus of 3 Francs.

Francs		Rixd.		Francs	Cen.		Rixd.	Gr.
As 300	:	76	::	1943	75	:	492	10
				76				
				3,00)1477,25				
				492,41667				
				24				
				10,00008				

FRANCE ON BERLIN.

Reduce 492 Rixdollars 10 Groschen, Prussian currency, into French money; exchange at 76 Rixdollars per 100 Ecus of 3 Francs.

Rixd.		Francs		Rixd.	Groschen		Francs	Cen.
As 76	:	300	::	492	10	:	1943	75
24				24				
1824				11818				
				300				
				1824)3545400(1943,75				
				1824				
				17214 &c.				

BERLIN ON HAMBURGH.

Reduce 1908 Marks 5 Schillings 4 Pfenings banco into Prussian currency; exchange at 145½ Prussian Rixdollars per 100 Rixdollars Hamburgh banco.

Rixd bco.		Rixd. Pr.		Marks.	Sch.	Pf.		Rixd.	Gr.
As 100	:	145½	::	1908	5	4	:	925	13
3				16					
300				30533					
16				12					
4800				366400					
12				145½					
57600		576,00)533112,00(925,54							
		5184		24					
		1471 &c.		12,96					

HAMBURGH ON BERLIN.

Reduce 925 Rixdollars 13 good Groschen Prussian currency into Hamburgh banco; exchange at 145½ Prussian Rixdollars per 100 Rixdollars Hamburgh banco.

Rixd. Pr.		Rixd. bco.		Rixd.	Gr.		Mks.	Sch.	Pf.
As 145½	:	100	::	925	13	:	1908	5	4
24		3		24					
3492		300		22213					
				300					
				6663900(1908			Marks	Sch.	Pf.
				3492				5	4
				31719 &c.					

Remainder × 16 × 12 &c.

BERLIN ON LONDON.

Reduce £115 13s. 4d. sterling into Prussian currency; exchange at 6¾ Rixdollars per £ sterling.

£		Rixd.		£	s.	d.		Rixd.	Gr.
As 1	:	6¾	::	115	13	4	:	780	18
		24		20					
		162		2313					
				12					
				27760					
				162					
				24				Rds.	Gr.
				24,0)449712,0(18738 Gr.(780					18
				24		168			
				2097 &c.		193 &c.			

LONDON ON BERLIN.

Reduce 780 Rixdollars 18 good Groschen Prussian currency into sterling; exchange at 6¾ Rixdollars per £ sterling.

Rixd.		£		Rixd.	Gr.		£	s.	d.
As 6¾	:	1	::	780	18	:	115	13	4
24				24					
162				18738			£	s.	d.
				162)18738(115				13	4
				162					
				253 &c.					

Remainder × 20 × 12 &c.

N.B. The Exchanges between BERLIN and most other cities in GERMANY are computed by a Percentage, like those with Amsterdam and Hamburgh, and the calculations are, of course, similar. Examples of those cities are therefore deemed unnecessary, as well as between places where there is little or no commercial intercourse.

BOLOGNA, *see Rome.*

BREMEN.

MONIES OF EXCHANGE.

Exchanges are computed in Rixdollars, Grotes, and Swares.

5 Swares = 1 Grote; 32 Grotes = 1 Bremen Mark; 72 Grotes, or 2¼ Marks = 1 Rixdollar of account.

96 Grotes, or 1⅓ Rixdollar of account = 1 Rixdollar specie.

COURSE OF EXCHANGE,
From the Bremen Quotation.
January, 1820.

			EXPLANATION.
AMSTERDAM....	143.....	BREMEN gives 143	Rixdollars.... for 100 Rixdollars.
FRANCE.....	20.....	——— gives 20	Grotes ..... for 1 Franc.
FRANCFORT....	110.....	——— gives 110	Rixdollars .. for 100 Rixdollars convention money.
HAMBURGH	142.....	——— gives 142	——— .... for 100 Rixdollars banco.
LEIPSIC.....	104.....	——— gives 104	——— .... for 100 Rixdollars currency.
LONDON	605.....	——— gives 605	——— .... for £100 sterling.
NUREMBERG ..	104.....	——— gives 104	——— .... for 100 Rixdollars currency.
VIENNA.....	90.....	——— gives 90	——— .... for 100 Rixdollars currency.

[For the usances and days of grace, see BREMEN, vol. i.]

BREMEN ON HAMBURGH.

Reduce 7817 Marks 11 Schillings 4 Pfenings banco into money of Bremen; exchange at 140 Rixdollars Bremen currency per 100 Rixdollars Hamburgh banco.

Rixd. Ham.		Rixd. Br.		Marks	Sch.	Pf.		Rixd.	Grotes
As 100	:	140	::	7817	11	4	:	3648	19
3				16					
300				125083					
16				12					
4800				1501000					
12				140					
57600		576,00)2101400,00(3648						Rixd.	Gr. 19
		1728							
		3734 &c.							

Remainder × 72 &c.

HAMBURGH ON BREMEN.

Reduce 3648 Rixdollars 19 Grotes, Bremen currency, into money of Hamburgh; exchange at 140 Rixdollars Bremen per 100 Rixdollars Hamburgh banco.

Rixd. Br.		Rixd. Ham.		Rixd.	Grotes		Marks	Sch.	Pf.
As 140	:	100	::	3648	19	:	7817	11	4
72		3		72					
10080		300		262675					
				300					
				1008,0)7880250,0(7817			Mks.	Sch.	Pf.
				7056				11	4
				8242 &c.					

Remainder × 16 × 12 &c.

BREMEN ON LONDON.

Reduce £383 6s. 8d. sterling into money of Bremen; exchange at 604½ Rixdollars per £100 sterling.

£		Rixdollars		£	s.	d.		Rixd.	Grotes
As 100	:	604½	:	383	6	8	:	2317	18
				20					
				7666					
				12					
				92000					
				604½					
				24,000)55614,000(2317				Rixd.	Gr. 18
				48					
				76 &c.					

LONDON ON BREMEN.

Reduce 2317 Rixdollars 18 Grotes, Bremen currency, into sterling; exchange at 604½ Rixdollars per £100 sterling.

Rixdollars		£		Rixd.	Grotes		£	s.	d.
As 604½	:	100	::	2317	18	:	383	6	8
72				72					
1208				43524)16684200(383			£	s.	d.
4228				130572				6	8
36				362700					
43524				348192					
				145080 &c.					

Remainder × 20 &c.

The Exchanges between Bremen and other places are similar to the above, as may be seen by the Quotation.

CONSTANTINOPLE.

MONIES OF EXCHANGE.

Exchanges are computed in Piastres, Paras, and Aspers; or in Piastres and Aspers; sometimes in Piastres and half Paras, or in Piastres and Minas.

3 Aspers=1 Para; 40 Paras, or 120 Aspers=1 Piastre, or Turkish Dollar.

80 half Paras, or 100 Minas, also called Aspers=1 Piastre.

COURSE OF EXCHANGE, From the Constantinople Quotation. *January*, 1820.		EXPLANATION.	
Amsterdam .. 115	.. Constantinople	gives 115 Paras	for 1 Florin.
France 14½	.. ———	receives 14½ Sols	for 1 Piastre.
Genoa 44	.. ———	gives 44 Paras	for 1 Lira fuori banco.
Hamburgh 20	.. ———	receives 20 Grotes Flemish	for 1 Piastre.
Leghorn 283	.. ———	gives 283 Paras	for 1 Pezza of 8 Reals.
London 35	.. ———	gives 35 Piastres	for £1 sterling.
Malta 124	.. ———	gives 124 Paras	for 1 Scudo.
Russia..... 73	.. ———	receives 73 Copecs	for 1 Piastre.
Smyrna 100½	.. ———	receives 100½ Piastres....	for 100 Piastres.
Trieste 140	.. ———	gives 140 Paras	for 1 Florin current.
Venice 80	.. ———	receives 80 Centimes	for 1 Piastre.
Vienna 140	.. ———	gives 140 Paras	for 1 Florin current.

[For usances and other customs relating to Bills of Exchange, see Constantinople, vol. i.]

CONSTANTINOPLE ON AMSTERDAM.

Reduce 2904 Florins 12 Stivers 2 Pennings into Turkish money; exchange at 61 Paras per Florin.

Florin	Paras		Florins	Stivers	Pen.		Dollars	Paras
As 1	: 61	: :	2904	12	2	:	4429	21
20			20					
20			58092					
16			16					
320			929474					
			61					
			4,0					

320)56697914(17718,1
320 &c.

4429 Dol. 21 Paras.

As the Turkish monies are subject to continual variation, the old prices are retained in these questions, being equally proper to exemplify the operations.

AMSTERDAM ON CONSTANTINOPLE.

Reduce 4429 Turkish Dollars 21 Paras into Dutch money; exchange at 61 Paras per Florin.

Paras	Florin		Dollars	Paras		Florins	Stivers	Pen.
As 61	: 1	: :	4429	21	:	2904	12	2
			40					
			177181					

61)177181(2904 Fl. 12 Sti. 2 Pen.
122
551
549
281 &c.

Remainder × 20 × 16 &c.

CONSTANTINOPLE ON FRANCE.

Reduce 8903 Francs 7 Centimes of France into Turkish money; exchange at 1 Franc 38 Centimes per Piastre.

Franc	Cen.	Dollar		Francs	Centimes		Dollars	Paras
As 1	38	: 1	: :	8903	7	:	6451	20

1,38)8903,07(6451 20
828
623 &c.

The most general mode of quoting the exchange is in French Sols for the Piastre. The Sol, in such case, is considered as $\frac{1}{20}$ of the Franc, or 5 Centimes: thus—

Reduce 5385 Francs 84 Centimes into Piastres; exchange at 14½ Sols per Piastre.

Sols	Piastre		Francs	Cen.		Piastres	Paras
As 14,5	: 1	: :	5385	84	:	7428	30
5			1				
72,5			725)5385,84(7428			30	
			5075				
			3108 &c.				

FRANCE ON CONSTANTINOPLE.

Reduce 6451 Turkish Dollars 20 Paras into French money; exchange at 1 Franc 38 Centimes per Piastre.

Dollar		Franc	Cen.		Dollars	Paras		Francs	Centimes
As 1	:	1	38	: :	6451	20	:	8903	7
40					40				
40					258060				
					1,38				
					4,0)35612,280				

8903,97 Francs.

Reduce 7428 Piastres 30 Paras into French money; exchange at 14½ Sols per Piastre.

Piastre		Sols		Piastres	Paras		Francs	Cen.
As 1	:	14,5	: :	7428	30	:	5385	84
40		5		40				
40		72,5		297150				
				72,5				
				4,0)2154337,50				

5385,84

CONSTANTINOPLE ON LEGHORN.

Reduce 264 Pezze 10 Soldi 8 Denari into Turkish money; exchange at 142½ Paras per Pezza.

	Pezza		Paras		Pezze	Soldi	Den.		Dollars	Paras
As	1.	:	142½	: :	264	10	8	:	942	16
	20				20					
	20				5290					
	12				12					
	240				63488					
					142½					
					4,0					

24,0)904704,0(3769,6
72
184 &c.

942 Dol. 16 Paras.

By the Chain Rule.

264 Pezze 10 Soldi 8 Den.

1 Pezza = 142½ Paras.
40 Paras = 1 Dollar.

Result as above.

LEGHORN ON CONSTANTINOPLE.

Reduce 942 Turkish Dollars 16 Paras into money of Leghorn; exchange at 142½ Paras per Pezza of 8 Reals.

	Paras		Pez.		Dollars	Paras		Pezze	Soldi	Den.
As	142½	:	1	: :	942	16	:	264	10	8
	2				40					
	285				37696					
					2					
					75392					

Pez. Sol. Den.
285)75392(264 10 8
570
1839
1710
1292 &c.

By the Chain Rule.

942 Dollars 16 Paras.

1 Dollar = 40 Paras.
142½ Paras = 1 Pezza.

Result as above.

CONSTANTINOPLE ON LONDON.

Reduce £81 2s. 7d. sterling into Turkish money; exchange at 18 Turkish Dollars per £ sterling.

	£		Dollars		£	s.	d.		Dollars	Paras
As	1	:	18	: :	81	2	7	:	1460	13
	20				20					
	20				1622					
	12				12					
	240				19471					
					18					
					350478					

Dollars Paras
24,0)350478(1460 13
24
110 &c.

Remainder × 40 &c.

LONDON ON CONSTANTINOPLE.

Reduce 1460 Turkish Dollars 13 Paras into sterling; exchange at 18 Dollars per £ sterling.

	Dollars		£		Dollars	Paras		£	s.	d.
As	18	:	1	::	1460	13	:	81	2	7
	40				40					
	720				58413					

£ s. d.
720)58413(81 2 7
5760
813
720
93
20
720)1860(2
1440
420 &c.

CONSTANTINOPLE ON VENICE.

Reduce 10420 Lire 13 Soldi 4 Denari Piccoli into Turkish money; exchange at 354 Paras per Sequin of 22 Lire.

Lire	Paras		Lire	Sol.	Den.		Dollars	Paras
As 22	: 354	::	10420	13	4	:	4191	38
20			20					
440			208413					
12			12					
5280			2500960					
			354					
			4,0					
			5280)885339840(16767,8					
			5280					
			35733 &c.				4191 Dol. 38 Paras.	

The above mode of exchange is partly discontinued, as Venice gives a variable number of Italian Centimes for the Piastre, making the operation the same as with France.

VENICE ON CONSTANTINOPLE.

Reduce 4191 Turkish Dollars 38 Paras into Venetian money; exchange at 354 Paras per Sequin of 22 Lire Piccole.

Paras	Lire		Dollars	Paras		Lire	Sol.	Den.
As 354	: 22	::	4191	38	:	10420	13	4
			40					
			167678					
			22					
			354)3688916(10420			Lire	Sol.	Den.
			354					
			1489					
			1416					
			731 &c.					

Remainder × 20 × 12 &c.

CONSTANTINOPLE ON VIENNA.

Reduce 3737 Florins 48 Creutzers into Turkish money; the exchange of Vienna with Constantinople being at 50 Paras per Florin.

Florin	Paras		Florins	Creutzers		Dollars	Paras
As 1	: 50	::	3737	48	:	4672	10
60			60				
60			224268				
			50				
			6,0)1121340,0				
			4,0)18689,0				
			4672	10			

By the Chain Rule.

		3737,8 Florins
1 Florin	=	50 Paras.
40 Paras	=	1 Dollar.

Result as above.

VIENNA ON CONSTANTINOPLE.

Reduce 4672 Turkish Dollars 10 Paras into Austrian money; the exchange of Constantinople with Vienna being at 50 Paras per Florin.

Paras	Florin		Dollars	Paras		Florins	Cr.
As 50	: 1	::	4672	10	:	3737	48
			40				
			5,0)18689,0				
			3737,8				
			60				
			48,0				

By the Chain Rule.

		4672,25 Dollars.
1 Dollar	=	40 Paras.
50 Paras	=	1 Florin.

Result as above.

COPENHAGEN.

MONIES OF EXCHANGE.

Exchanges are computed here in Rixdollars, Marks, and Skillings Danish; but sometimes in Rixdollars, Marks, and Schillings Lubs. Pfenings are also occasionally reckoned.

12 Pfenings = 1 Skilling.

16 Skillings = 1 Mark.

6 Marks Danish, or 3 Marks Lubs = 1 Ryksdaler, or Rixdollar.

Thus 2 Pfenings, Skillings, or Marks Danish = 1 Pfening, Schilling, or Mark Lubs.

COURSE OF EXCHANGE,
From the Copenhagen Quotation.

			EXPLANATION.
Amsterdam..	143	.... Copenhagen	gives 143 Rixdollars Danish currency,. for 100 Rdrs.
France	25	.... ———	gives 25 Skillings Danish,..... for 1 Franc.
Hamburgh ..	149¼	.... ———	gives 149¼ Rixdollars do. ..... for 100 Rdrs. bco.
London.....	6 33....	———	gives 6 Rixdollars 33 Skillings..... for £1 sterling.
Stockholm ..	36	.... ———	receives 36 Skillings ..... for 1 Rixdollar.

[For days of grace and other particulars relating to Bills of Exchange, see Copenhagen, vol. i.]

COPENHAGEN ON AMSTERDAM.

Reduce 1310 Florins 4 Stivers 13 Pennings into Danish money; exchange at 127 Rixdollars Danish per 100 Rixdollars Dutch current, and the agio of banco on current being $3\frac{3}{4}$ per cent.

	Rixd. cur.	Banco		Flor.	Sti.	Pen. bco.	Flor.	Stlv.	Pen. cur.
As	100	: $103\frac{3}{4}$	: :	1310	4	13 :	1359	7	8

	Rxds. Dutch.		Rxds. Danish.		Flor.	Stl.	Pen.		Rxds.	Mks.	Sk.
And as	100	:	127	: :	1359	7	8	:	690	3	6
	$2\frac{1}{2}$				× 20		× 16				
	250				435000						
	20				127						
	5000		8,0000)		5524,5000						
	16				690,5625						
	80000				6						
					3,3750						
					16						
					6,0000						

By the Chain Rule.

1310 Flor. 4 St. 13 Pen. bco.
100 Florins bco. = $103\frac{3}{4}$ Florins current.
$2\frac{1}{2}$ Florins = 1 Rixdollar.
100 Rxds. cur. = 127 Rixdollars Danish.

Result as above.

AMSTERDAM ON COPENHAGEN.

Reduce 690 Rixdollars 3 Marks 6 Skillings Danish into Dutch banco; exchange at 127 Rixdollars Danish per 100 Rixdollars Dutch current, and the agio of banco on current being $3\frac{3}{4}$ per cent.

	Rxds. Danish.		Rixds. cur.		Rxds.	Mks.	Sks.		Florins	Sti.	Pen.
As	127	:	100	: :	690	3	6	:	1359	7	8
	6		$2\frac{1}{2}$		6						
	762		250		4143						
	16				16						
	12192				66294						
					250						
					12192)16573500(				Fl. 1359	Sti. 7	Pen. cur. 8

	Flor.	Sti.	Pen. cur.		Fl.	St.	Pen bco.
And as $103\frac{3}{4}$: 100 : :	1359	7	8	:	1310	4	13
4	4		400				
415	400		415)543750(		Fl. 1310	Sti. 4	Pen. 13
			415 &c.				

By the Chain Rule.

690 Rxds. 3 Mks. 6 Sks.
127 Rxds. Danish = 100 Rxds. Dutch current.
$103\frac{3}{4}$ Rxds. current = 100 Rxds. banco.
1 Rixdollar = $2\frac{1}{2}$ Florins.

Result as above.

COPENHAGEN ON FRANCE.

Reduce 6698 Francs 36 Centimes into Danish money; exchange at $72\frac{1}{2}$ Rixdollars per 100 Ecus of 3 Francs.

	Francs		Rixdollars		Francs		Rixdollars	Marks	Skil.
As	300	:	$72\frac{1}{2}$	:	6698,36	:	1618	4	10
					72,5				
					3,00)4856,31100				
					1618,77033				
					6				
					4,62198				
					16				
					9,95168				

FRANCE ON COPENHAGEN.

Reduce 1618 Rixdollars 4 Marks 10 Skillings Danish into French money; exchange at $72\frac{1}{2}$ Rixdollars per 100 Ecus of 3 Francs.

	Rixd.		Francs		Rixd.	Mks.	Skill.		Francs	Cen.
As	$72\frac{1}{2}$	:	300	: :	1618	4	10	:	6698	36
	6				6					
	435				9712					
	16				16					
	6960				155402					
					300					
					696,0)1662060,0(				Francs 6698,36	
					4176					
					4860 &c.					

COPENHAGEN ON HAMBURGH.

Reduce 12354 Marks 11 Schillings Hamburgh banco into Danish money; exchange at 142 Rixdollars Danish per 100 Rixdollars banco.

Rixd. bco.		Rixd. Dan.		Mks.	Sch.		Rixd.	Mks.	Sks.
As 100	:	142	::	12354	11	:	5847	5	5
3				16					
300				197675					
16				142					
4800				48,00)280698,50(5847					
				240					
				406 &c.					

By the Chain Rule.

			12354 Marks 11 Sch.
3 Marks		=	1 Rixdollar.
100 Rixdollars		=	142 Rixd. Danish.

Result as above.

HAMBURGH ON COPENHAGEN.

Reduce 5847 Rixdollars 5 Marks 5 Skillings Danish into Hamburgh money; exchange at 142 Rixdollars Danish per 100 Rixdollars Hamburgh banco.

Rxds. Danish.		Rxds. banco			Rxds.	Mks.	Sks.		Marks	Sch.
As 142	:	100	:	:	5847	5	5	:	12354	11
6		3			6					
852		300			35087					
16					16					
13632					561397					
					300					
					13632)168419100(12354					
					13632					
					32099 &c.					

By the Chain Rule.

			5847 Rxds. 5 Mks. 5 Sks.
142 Rxds. Danish		=	100 Rxds. Hamburgh bco.
1 Rixdollar		=	3 Marks.

Result as above.

COPENHAGEN ON LONDON.

Reduce £621 16s. 3d. sterling into Danish money; exchange at 6 Rixdollars 1 Mark Danish per £ sterling.

£	Rxds.	Mark		£	s.	d.		Rxds.	Mks.	Skil.
As 1	: 6	1	: :	621	16	3	:	3834	3	1
6				20						
37				12436						
				12						
				149235						
				37						
				24,0)552169,5(23007						
				48						
				72 &c.						

3834 Rdrs. 3 Mks. 1Sk.

LONDON ON COPENHAGEN.

Reduce 3834 Rixdollars 3 Marks 1 Skilling Danish into sterling; exchange at 6 Rixdollars 1 Mark per £ sterling.

Rdxs.	Mark		£		Rxds.	Marks	Sk.		£	s.	d.
As 6	1	:	1	: :	3834	3	1	:	621	16	3
6					6						
37					23007						
16					16						
592					592)368113(621				16	3	
					3552						
					1291						
					1184						
					1073 &c.						

Remainder × 20 × 12 &c.

DANTZIC.

MONIES OF EXCHANGE.

Exchanges are computed here in Florins, Groschen, and Pfenings.

3 Pfenings = 1 Groschen.

30 Groschen = 1 Florin or Gulden.

3 Florins = 1 Rixdollar.

COURSE OF EXCHANGE, From the Dantzic Quotation. *January*, 1820.		EXPLANATION.
AMSTERDAM . .	314 . . .	DANTZIC gives 314 Groschen . . . for 1 Pound Flemish.
FRANCE	98 . . .	——— gives 98 Rixdollars . . for 100 Ecus of 3 Francs.
FRANCFORT . .	88 . . .	——— gives 88 Groschen . . . for 1 Rixdollar.
HAMBURGH . .	141 . . .	——— gives 141 Groschen . . . for 1 Rixdollar specie.
LEIPSIC	104 . . .	——— gives 104 Rixdollars . . for 100 Rixdollars.
LONDON	19⅓ . . .	——— gives 19⅓ Florins . . . . for £1 sterling.
STOCKHOLM . .	9½ . . .	——— receives 9½ Skillings . . for 1 Florin.

[For the usances and other particulars relating to Bills of Exchange, see DANTZIC, vol. i.]

DANTZIC ON AMSTERDAM.

Reduce 1881 Florins 16 Stivers into Dantzic money; exchange at 415 Dantzic Groschen per £ Flemish.

£ Flemish	Groschen		Florins	Stivers		Florins	Grosch.	Pfenings
As 1	: 415	: :	1881	16	:	4338	17	15
6			20					
6			37636					
20			415					
120	12,0)1561894,0							
	3,0)13015,7	15						

4338 Flor. 17 Grosch. 15 Pfen.

By the Chain Rule.

1881 Florins 16 Stivers.

6 Dutch Florins	=	1 Pound Flemish.
1 Pound Flemish	=	415 Groschen.
30 Groschen	=	1 Florin Dantzic.

Result as above.

AMSTERDAM ON DANTZIC.

Reduce 4338 Florins 17 Groschen 15 Pfenings Dantzic currency into Dutch money; exchange at 415 Groschen per £ Flemish.

Groschen	£ Flemish		Florins	Gr.	Pf.		Florins	Stivers
As 415	: 1	: :	4338	17	15	:	1881	16
18			30					
7470			130157					
			18					
			£	s.	d			
	747,0)234284,1		(313	12	8	Flemish.		
	2241 &c.			6				
			1881	12				
				4	St. for 8d.			

Fl. 1881 16 Stivers.

By the Chain Rule.

4338 Fl. 17 Gr. 15 Pf.

1 Florin Dantzic	=	30 Groschen.
415 Groschen	=	1 Pound Flemish.
1 Pound Flemish	=	6 Dutch Florins.

Result as above.

DANTZIC ON HAMBURGH.

Reduce 837 Marks 4 Schillings banco into Dantzic money; exchange at 168 Groschen per Rixdollar banco.

Rixd.	Marks	Groschen		Marks	Schil.		Florins	Groschen
As 1 or	3	: 168	: :	837	4	:	1562	26
	16			16				
	48			13396				
				168				
				3,0				
			48)2250528(4688,6					
			192					
				1562 Florins 26 Gr.				

By the Chain Rule.

837 Marks 4 Schillings.

3 Marks	=	1 Rixdollar.
1 Rixdollar	=	168 Groschen.
30 Groschen	=	1 Florin.

Result as above.

HAMBURGH ON DANTZIC.

Reduce 1562 Florins 26 Groschen Dantzic currency into Hamburgh banco; exchange at 168 Groschen per Rixdollar banco.

Groschen	Rixd.	Marks		Florins	Groschen		Mks.	Sch.
As 168	: 1	or 3	: :	1562	26	:	837	4
				30				
				46886				
				3				
				Mks.	Sch.			
			168)140658(837		4			

By the Chain Rule.

1562 Florins 26 Groschen.

1 Florin	=	30 Groschen.
168 Groschen	=	1 Rixd. banco.
1 Rixdollar	=	3 Marks.

Result as above.

N.B. The Exchanges of Dantzic with London and Paris are deemed too simple to require illustration.

See Quotation.

FRANCE.

MONIES OF EXCHANGE.

Exchanges are computed here in Francs and Centimes; or in Livres, Sous, and Deniers.

10 Centimes = 1 Decime; 10 Decimes, or 100 Centimes = 1 Franc; 12 Deniers = 1 Sou or Sol; 20 Sous = 1 Livre Tournois; 80 Francs = 81 Livres; 3 Livres, or 3 Francs = 1 Ecu of exchange.

COURSE OF EXCHANGE, From the Paris Quotation. *January*, 1820.			EXPLANATION.			
AMSTERDAM..	53¾		.. PARIS receives	53¾	Grotes Flemish	for 1 Ecu of 3 Francs.
AUGSBURG ..	249		.. ——— gives	249	Centimes	for 1 Florin current.
BASIL	1 perte		.. ——— gives	101	Livres	for 100 Livres.
BERLIN.....	3	80	.. ——— gives	3	Francs 80 Centimes .	for 1 Rixdollar.
FRANCFORT ..	75		.. ——— receives	75	Rixdollars current ..	for 100 Ecus.
GENEVA	162		.. ——— gives	162	Francs	for 100 Livres current.
GENOA	465		.. ——— gives	465	Centimes	for 1 Pezza of 5¼ Lire.
HAMBURGH ..	185		.. ——— gives	185	Francs	for 100 Marks banco.
LEGHORN	503		.. ——— gives	503	Centimes	for 1 Pezza of 8 Reals.
LISBON	520		.. ——— receives	520	Rees	for 1 Ecu of 3 Francs.
LONDON	24		.. ——— gives	24	Francs	for £1 sterling.
MILAN	8	6	.. ——— receives	8	Lire 6 Soldi	for 6 Francs.
NAPLES	4	20	.. ——— gives	4	Francs 20 Centimes..	for 1 Ducato di regno.
SPAIN	15	40	.. ——— gives	15	Francs 40 Centimes..	for 1 Doubloon of exchange.
VIENNA	257		.. ——— gives	257	Francs	for 100 Florins effective.

[For the usances and other particulars relating to Bills of Exchange, see FRANCE, vol. i.]

FRANCE ON LONDON, see page 21.
FRANCE ON AMSTERDAM, see page 29.
FRANCE ON AUGSBURG, see page 33.
FRANCE ON GENEVA, see page 58.

FRANCE ON GENOA.

Reduce 1382 Lire 3 Soldi 1½ Denari into French money; exchange at 4 Francs 80 Centimes per Pezza.

1382 3 1½
4

Pezze Soldi Den. di Pezza
23)5528 12 6(240 7 6
46
92 &c.

Pezza Francs Pezze Sol. Den. Francs Cents.
Then as 1 : 4,80 : : 240 7 6 : 1153 80
4,80
19200
960
5 Soldi = ¼ 120
2 Soldi 6 Den. = ½.. 60
1153,80

LONDON ON FRANCE, see page 21.
AMSTERDAM ON FRANCE, see page 29.
AUGSBURG ON FRANCE, see page 33.
GENEVA ON FRANCE, see page 58.

GENOA ON FRANCE.

Reduce 1153 Francs 80 Centimes into money of Genoa; exchange at 4 Francs 80 Centimes per Pezza of 5¾ Lire.

Francs Pezza Francs Pezze Soldi D. di Pez.
As 4,80 : 1 : : 1153,80 : 240 7 6
48,0)11538,0(240 7 6
96 &c.

But if the answer be required in Lire, say,

Pezze Sol. D. di P. Lire Sol. D. di L.
As 4 : 23 : : 240 7 6 : 1382 3 1½
23
720
480
5 Soldi = ¼ 5 15
2 Soldi 6 Den. = ½ . 2 17 6
4)5528 12 6
1382 3 1½

FRANCE ON HAMBURGH.

Reduce 3492 Marks 15 Schillings 6 Pfenings banco into French money; exchange at 25½ Schillings Lubs banco, per Ecu of 3 Francs.

Schillings Francs Marks Sch. Pf. Francs
As 25½ : 3 : : 3492 15 6 : 6575
12 16
306 55887
12
670650
3
306)2011950(6575
1836
1759 &c.

HAMBURGH ON FRANCE.

Reduce 6575 Francs into Hamburgh money; exchange at 25½ Schillings Lubs banco, per Ecu of 3 Francs.

Francs Sch. Francs Marks Sch. Pf. bco.
As 3 : 25½ : : 6575 : 3492 15 6
25½
3)167662½
16)55887½
3492 Marks 15½ Schillings.

Or thus decimally.

Francs Sch. Francs Marks Sch. Pf.
As 3 : 25,5 : : 6575 : 3492 15 6
25,5
3)167662,5
16)55887,5
3492,96875
× 16 × 12

FRANCE ON LEGHORN.

Reduce 760 Pezze 7 Soldi 6 Denari into French money; exchange at 5 Francs 20 Centimes per Pezza of 8 Reals.

	Pezza		Francs		Pezze	Sol.	Den.		Francs	Cent.
As	1	:	5,20	: :	760	7	6	:	3953	95

5,20

15200
3800
5 Soldi=¼ 130
2 Soldi 6 Denari=½ . 65

3953,95

Or thus decimally.

760 Pezze 7 Soldi 6 Denari is 760⅜=760,375

As	1	:	5,20	: :	760,375	:	3953,95

5,20

3953,95000

LEGHORN ON FRANCE.

Reduce 3953 Francs 95 Centimes into money of Leghorn; exchange at 5 Francs 20 Centimes per Pezza of 8 Reals.

	Francs		Pezza		Francs		Pezze	Sol.	Den.
As	5,20	:	1	: :	3953,95	:	760	7	6

52,0)39539,5(760 7 6
364

313
312

19 × 20 and 12 &c.

Or thus decimally.

As	5,20	:	1	: :	3953,95	:	760,375

20

7,500
12

6,000

FRANCE ON LISBON.

Reduce 617 Mil. 334 Rees into French money; exchange at 465 Rees per Ecu of 3 Francs.

	Rees		Francs		Milrees		Francs	Cents.
As	465	:	3	: :	617,334	:	3982	80

3

465)1852002(3982,80
1395 &c.

But if the sum were given in Crusades, they are reduced to Milrees by multiplying by 4, cutting off the last figure, and to this figure adding the first of the Rees, as in the following example.

Reduce 1543 Crusades 134 Rees into Milrees, &c.

4

617,2
134

,334

Ans. 617 Mil. 334 Rees.

LISBON ON FRANCE.

Reduce 3982 Francs 80 Centimes into money of Portugal; exchange at 465 Rees per Ecu of 3 Francs.

	Francs		Rees		Francs	Cents.		Milrees	Rees
As	3	:	465	: :	3982	80	:	617	334

465

3)1852002,00

617,334

But if the answer were required in Crusades, the last two figures should be cut off, and the others divided by 4: thus,

4)6173,34

1543 Crusades 134 Rees.

FRANCE ON MILAN.

Reduce 4536 Lire 17 Soldi 6 Denari into French money; exchange at 7 Lire 10 Soldi per 6 Francs.

	Lire	Soldi		Francs		Lire	Soldi	Den.		Francs	Cen.
As	7	10	:	6	::	4536	17	6	:	3629	50

20 — 20

150 — 90737

12 — 12

1800 — 1088850

6

18,00)65331,00(3629,50

54 &c.

Exchanges have been recently transacted between Milan and France by giving Italian Livres for Francs, with a Percentage on the latter; as in the annexed example.

MILAN ON FRANCE.

Reduce 3629 Francs 50 Centimes into money of Milan; exchange at 7 Lire 10 Soldi per 6 Francs.

	Francs		Lire	Soldi		Francs		Lire	Sol.	Den.
As	6	:	7	10	::	3629,50	:	4536	17	6

7

2540650

10 Soldi = ½ 181475

6)27221,25

4536,875

20

17,500

12

6,00

Reduce 3629 Francs 50 Centimes into Italian Livres; exchange at 99 Francs for 100 Italian Livres.

	Francs		It. Livres		Francs		It. Livres
As	99	:	100	::	3629,50	:	3666,06

FRANCE ON NAPLES.

Reduce 580 Ducats 56 Grains into French money; exchange at 4 Francs 25 Centimes per Ducato di regno.

	Ducat		Francs	Cen.		Ducats		Francs	Cen.
As	1	:	4	25	::	580,56	:	2467	38

4,25

290280

116112

232224

2467,3800

NAPLES ON FRANCE.

Reduce 2467 Francs 38 Centimes into money of Naples; exchange at 4 Francs 25 Centimes per Ducato di regno.

	Francs		Ducat			Francs		Ducats	Gr.
As	4,25	.	1	:	::	2467,38	:	580	56

425)2467,38(580 56

2125

3423

3400

2380 &c.

FRANCE ON SPAIN.

Reduce 1777 Dollars 7 Reals 2 Maravedis of plate into French money; exchange at 14 Francs 45 Centimes per Doubloon of Exchange of 4 Dollars of plate.

	Dollars		Francs			Doll.	Reals	Mar.		Francs	Cent.
As	4	:	14,45	: :		1777	7	2	:	6422	60
	× 8 × 34					8					
	1088					14223					
						34					
						483584					
						14,45					

1088)6967788,80(6422,60
6528

4597 &c.

By the Chain Rule.

1777 Doll. 7 Rea. 2 Mar.
4 Dollars = 1 Doub. of exchange.
1 Doubloon = 14 Francs 45 Centimes.

Result as above.

SPAIN ON FRANCE.

Reduce 6422 Francs 60 Centimes into Spanish money; exchange at 14 Francs 45 Centimes per Doubloon of exchange of 4 Dollars of Plate.

	Francs		Doll.		Francs			Doll.	Reals	Mar.
As	14,45	:	4	: :	6422,60	:		1777	7	2
					4					
							Dol.	Reals	Mar.	
					14,45)25690,40(1777			7	2	
					1445					
					11240 &c.					

Remainder × 8 × 34 &c.

By the Chain Rule.

6422 Francs 60 Centimes.
14 Francs 45 Cent. = 1 Doubl. of exchange.
1 Doubloon = 4 Dollars of plate.

Result as above.

FRANCE ON VIENNA.

Reduce 6025 Florins 55 Creutzers into French money; exchange at 257 Francs per 100 Florins.

	Florins		Francs		Florins	Cr.		Francs	Cent.
As	100	:	257	: :	6025	55	:	15486	60
	60				60				
	6000				361555				
					257				
					6,000)92919,635				
					15486,60				

By Decimals.

55 Creutzers = $\frac{55}{60}$ = ,916.

	Florins		Francs		Florins		Francs
As	100	:	257	: :	6025,916	:	15486,60
					257		
					1,00)1548660,412		
					15486,60		

VIENNA ON FRANCE.

Reduce 15486 Francs 60 Centimes into money of Vienna; exchange at 257 Francs per 100 Florins.

	Francs		Florins		Francs		Florins	Cr.
As	257	:	100	: :	15486,60	:	6025	55
					100			
					257)1548660(6025			
					1542			
					666			
					514			
					1520			

Remainder × 60 &c.

FRANCFORT.

MONIES OF EXCHANGE.

Exchanges are computed in Florins and Creutzers, or in Rixdollars and Creutzers; and also in Florins and Batzen.

4 Pfenings = 1 Creutzer.

4 Creutzers = 1 Batze.

60 Creutzers, or 15 Batzen = 1 Florin.

90 Creutzers, or 1½ Florin = 1 Rixdollar of account.

COURSE OF EXCHANGE, From the Francfort Quotation. *January*, 1820.				EXPLANATION.		
AMSTERDAM..	140¾	.. FRANCFORT	gives 140¾	Rixdollars of account	for 100	Rixdollars.
AUGSBURG ..	100¾	.. ————	gives 100¾	Ditto ditto	for 100	Ditto current.
BASIL	101¼	.. ————	gives 101¼	Ditto	for 100	Ditto in new Ecus.
BREMEN	108½	.. ————	gives 108½	Ditto	for 100	Ditto current.
FRANCE.....	79	.. ————	gives 79	Ditto	for 100	Ecus of 3 Livres.
HAMBURGH ..	150	.. ————	gives 150	Ditto of account..	for 100	Rixdollars banco.
LEIPSIC	100½	.. ————	gives 100½	Ditto	for 100	Ditto in Louis d'or.
LONDON.....	149	.. ————	gives 149	Batzen.....	for £1	sterling.
VIENNA.....	40	.. ————	gives 40	Florins.....	for 100	Florins current.

[For usances and other particulars relating to Bills of Exchange, see FRANCFORT, vol. i.]

FRANCFORT ON AMSTERDAM.

Reduce 6165 Florins 9 Stivers, 11 Pennings into money of Francfort; exchange at 141 Rixdollars Francfort currency per 100 Rixdollars of Amsterdam.

	Rixd. A.		Rixd. F.			Florins	Stivers	Pen.		Rixd.	Cr.
As	100	:	141	:	:	6165	9	11	:	3477	30
	2½					20					
	250					123309					
	20					16					
	5000					1972955					
	16					141					
	80000		8,0000			27818,6655					
						3477,3332					
						90					
						29,9880					

AMSTERDAM ON FRANCFORT.

Reduce 3477 Rixdollars 30 Creutzers, Francfort currency, into Dutch money; exchange at 141 Rixdollars Francfort per 100 Rixdollars of Amsterdam.

	Rixd. F.		Rixd. A.			Rixd.	Cr.		Fl.	St.	Pen.
As	141	:	100	:	:	3477	30	:	6165	9	11
	90		2½			90					
	12690		250			312960					
						250					
						1269,0)7824000,0(6165					
						7614					
						2100 &c.					

Remainder × 20 × 16 &c.

FRANCFORT ON FRANCE.

Reduce 9137 Francs 45 Centimes into money of Francfort; exchange at 76 Rixdollars per 100 Ecus of 3 Livres Tournois.

	Francs		Livres			Francs		Livres
As	80	:	81	:	:	9137,45	:	9251,667
								20
								13,340 Sous
								12
								4,080 Den.

	Livres		Rixd.			Livres	Sous	Den.		Florins	Cr.
And as	300	:	76	:	:	9251	13	4	:	3515	38
	20		1½			20					
	6000		114			185033					
	12					12					
	72000					2220400					
						114					
						72,000)253125,600(3515					38
						216					

FRANCE ON FRANCFORT.

Reduce 3515 Florins 38 Creutzers, Francfort currency, into French money; exchange at 76 Rixdollars per 100 Ecus of 3 Livres Tournois.

	Rixd.		Livres			Florins	Creutzers		Livres	Sous	Den.
As	76	:	300	:	:	3515	38	:	9251	17	9
	90					60					
	6840					210938					
						300					
						684,0)6328140,0(9251					
						6156					
						1721 &c.					

	Livres		Francs			Livres	Sous	Den.		Francs	Cen.
And as	81	:	80	:	:	9251	13	4	:	9137	45

The exchange between Francfort and Paris is sometimes differently quoted, which simplifies the operation.

FRANCFORT ON HAMBURGH.

Reduce 5929 Marks 9 Schillings 4 Pfenings, Hamburgh banco, into money of Francfort; exchange at 144 Rixdollars Francfort per 100 Rixdollars banco.

	Rixd.		Rixd. Fr.			Marks	Sch.	Pfen.		Rixd.	Cr.
As	100	:	144	:	:	5929	9	4	:	2846	18
	3					16					
	300					94873					
	16					12					
	4800					1138480					
	12					144					
	57600		5760,0			16394112,0				Rixd. 2846	Cr. 18
						11520					
						48741 &c.					

Remainder × 90 &c.

HAMBURGH ON FRANCFORT.

Reduce 2846 Rixdollars 18 Creutzers, Francfort currency, into Hamburgh money; exchange at 144 Rixdollars Francfort per 100 Rixdollars Hamburgh banco.

	Rixd. F.		Rixd. bco.			Rixd.	Cr.		Marks	Sch.	Pf.
As	144	:	100	:	:	2846	18	:	5929	9	4
	90		3			90					
	12960		300			256158					
						300					
						1296,0)7684740,0(5929				9	4
						6480					
						12047 &c.					

Remainder × 16 × 12 &c.

FRANCFORT ON LONDON.

Reduce £845 18s. 8d. into money of Francfort; exchange at 142½ Batzen per £ sterling.

	£		Batzen			£	s.	d.		Florins	Cr.
As	1	:	142½	:	:	845	18	8	:	8036	22
	20		4			20					
	20		570			16918					
	12					12					
	240					203024					
						570					
						24,0)11572368,0(48218,2					
						96					
						197 &c.					

6,0

8036 Florins 22 Cr.

LONDON ON FRANCFORT.

Reduce 8036 Florins 22 Creutzers, Francfort currency into sterling; exchange at 142½ Batzen per £ sterling.

	Batzen		£			Florins	Cr.		£	s.	d.
As	142½	:	1	:	:	8036	22	:	845	18	8
	4					60					
	570					57,0)482182(845			£	s.	d.
										18	8

By the Chain Rule.

8036 Florins 22 Creutzers.
1 Florin = 15 Batzen.
142½ Batzen = 1 £ sterling.

Result as above.

GENEVA.

MONIES OF EXCHANGE.

Exchanges are computed here in Livres, Sous, and Deniers; or in Ecus, Livres, &c.

12 Deniers = 1 Sou or Sol.

20 Sous = 1 Livre current.

3 Livres = 1 Ecu or Patagon.

COURSE OF EXCHANGE, From the Geneva Quotation. *February*, 1820.		EXPLANATION.	
AMSTERDAM .. 92	.. GENEVA	receives 92 Grotes Flemish	for 1 Ecu.
AUGSBURG 128	.. ———	receives 128 Rixdollars current..	for 100 Ecus.
BASLE 162	.. ———	receives 162 Livres Tournois....	for 106 Livres current.
FRANCE 162	.. ———	receives 162 Francs	for 100 Livres current.
GENOA 98	.. ———	gives 98 Ecus	for 100 Pezze of 5$\frac{1}{4}$ Lire f.b.
HAMBURGH.... 23	.. ———	gives 23 Sous current.....	for 1 Mark banco.
LEGHORN..... 104	.. ———	gives 104 Ecus	for 100 Pezze of 8 Reals.
LONDON 46	.. ———	receives 46 Pence sterling.....	for 1 Ecu of 3 Livres.
MILAN 100	.. ———	gives 100 Ecus	for 640 Lire correnti.
NAPLES ..... 50$\frac{3}{4}$	.. ———	gives 50$\frac{3}{4}$ Sous	for 1 Ducat.
PALERMO 15 3	.. ———	gives 15 Lire 3 Sous	for 1 Oncia.
SPAIN 44	.. ———	gives 44 Sous current	for 1 Dollar of Plate.
TURIN 84	.. ———	receives 84 Soldi Piemontesi....	for 1 Ecu.
VIENNA 128	.. ———	receives 128 Rixdollars current..	for 100 Ecus.

[For the usances and other particulars relating to Bills of Exchange, see GENEVA, vol. i.]

GENEVA ON AMSTERDAM.

Reduce 2479 Florins 13 Stivers 12 Pennings into money of Geneva; exchange at 92 Grotes Flemish per Ecu of 3 Livres.

	Grotes		Livres			Florins	Stivers	Pen.		Livres	Sous	Den.
As	92	:	3	: :		2479	13	12	:	3234	7	6
	8					20						
	736					49593						
						16						
						793500						
						3						
						2380500						

736)2380500(3234 Livres 7 Sous 6 Den.
2208
1725 &c.

By the Chain Rule.

2479 Flor. 13 Stivers 12 Pen.

1 Florin = 40 Grotes.
92 Grotes = 3 Livres.

Result as above.

AMSTERDAM ON GENEVA.

Reduce 3234 Livres 7 Sous 6 Deniers Geneva currency into Dutch money; exchange at 92 Grotes Flemish per Ecu of 3 Livres.

	Livres		Grotes		Livres	Sous	Den.		Florins	Sti.	Pen.
As	3	:	92	: :	3234	7	6	:	2479	13	12
	20		8		20						
	60		736		64687						
	12				12						
	720				776250						
					736						
					57132000						

72,0)57132000,0(793500 16
504
673 &c.

2,0)4959,3 12
2479 Fl. 13 Sti. 12 Pen.

By the Chain Rule.

3234 Livres 7 Sous 6 Den.

3 Livres = 92 Grotes.
40 Grotes = 1 Florin.

Result as above.

GENEVA ON FRANCE.

Reduce 1623 Francs 93 Centimes into money of Geneva; exchange at 168 Francs per 100 Livres current.

	Francs		Livres		Francs		Livres	Sous	Den.
As	168	:	100	: :	1623,93	:	966	12	6

168)162393(966 12 6
1512
1119 &c.

Remainder × 20 × 12 &c.

Or thus decimally.

	Francs		Livres		Francs		Livres	Sous	Den.
As	168	:	100	: :	1623,93	:	966	12	6

168)162393,00(966,625
1512 20
1119 &c. 12,500
12
6,0

FRANCE ON GENEVA.

Reduce 966 Livres 12 Sous 6 Deniers Geneva currency into sterling; exchange at 168 Francs per 100 Livres current.

	Livres		Francs		Livres	Sous	Den.		Francs	Cen.
As	100	:	168	: :	966	12	6	:	1623	93
	20				20					
	2000				19332					
	12				12					
	24000				231990					
					168					
					24,000)38974,320(1623,93					
					24					
					149 &c.					

Or thus decimally.

12 Sous 6 Deniers $\frac{12}{20} = \frac{1}{8} = ,625$

	Livres		Francs		Livres		Francs	Cen
As	100	:	168	: :	966,625	:	1623	93

GENEVA ON HAMBURGH.

Reduce 1068 Marks 4 Schillings 2 Pfenings banco into Geneva currency; exchange at 23 Sous current per Mark banco.

	Mark		Sous			Marks	Sch.	Pf.		Livres	Sous
As	1	:	23	:	:	1068	4	2	:	1228	10
	16					16					
	16					17092					
	12					12					
	192					205106					
						23					
						2,0					

192)4717438(2457,0
384
877 &c.

1228 Livres 10 Sous.

HAMBURGH ON GENEVA.

Reduce 1228 Livres 10 Sous Geneva currency into Hamburgh money; exchange at 23 Sous current per Mark Hamburgh banco.

	Sous		Mark			Livres	Sous		Mks.	Sch.	Pf.
As	23	:	1	:	:	1228	10	:	1068	4	2
						20					
						24570					

23)24570(1068 Marks, 4 Sch. 2 Pf.
23
157
138
190 &c.

Remainder × 16 × 12 &c.

GENEVA ON LEGHORN.

Reduce 1480 Pezze 8 Soldi 4 Denari into Geneva currency; exchange at 105 Ecus per 100 Pezze of 8 Reals.

	Pezze		Ecus			Pezze	Soldi	Den.		Livres	Sous	Den.
As	100	:	105	:	:	1480	8	4	:	4663	6	3
			3			20						
			315			29608						
						12						
						355300						
						315						

24,000)111919,500(4663 Livres, 6 Sous, 3 Den.
96
159 &c.

By the Chain Rule.

1480 Pezze 8 Sol. 4 Den.

100 Pezze = 105 Ecus.
1 Ecu = 3 Livres.

Result as above.

LEGHORN ON GENEVA.

Reduce 4663 Livres 6 Sous 3 Deniers Geneva currency into money of Leghorn; exchange at 105 Ecus per 100 Pezze of 8 Reals.

	Ecus		Pezze			Livres	Sous	Den.		Pezze	Soldi	Den.
As	105	:	100	:	:	4663	6	3	·	1480	8	4
	3					20						
	315					93266						
	20					12						
	6300					1119195,00						
	12											
	75600											

756,00)1119195,00(1480 Pezze, 8 Sol. 4 Den.
756
3631 &c.

By the Chain Rule.

4663 Livres 6 Sous 3 Den.

3 Livres = 1 Ecu.
105 Ecus = 100 Pezze of 8 Reals.

Result as above.

GENEVA ON LONDON.

Reduce £458 3s. 11d. sterling into money of Geneva; exchange at 48d. sterling per Ecu of 3 Livres current.

	d.		Livres		£	s.	d.		Livres	Sous	Den.
As	48	:	3	: :	458	3	11	:	6872	18	9

20

9163

12

109967

3

48)329901(687 Livres 18 Sous 9 Den

288

419 &c.

Remainder × 20 × 12 &c.

By the Chain Rule.

		£458 3s. 11d.
£1 sterling	=	240 Pence.
48 Pence	=	3 Livres.

Result as above.

LONDON ON GENEVA.

Reduce 6872 Livres 18 Sous 9 Deniers Geneva currency into sterling; exchange at 48d. sterling per Ecu of 3 Livres current.

	Livres		d.		Livres	Sous	Den.		£	s.	d.
As	3	:	48	: :	6872	18	9	:	458	3	11

20 20

60 137458

12 12

720 1649505

48

12

72,0)7917624,0(109967

72

2,0)916,3 11

717 &c.

£458 3s. 11d.

By the Chain Rule.

		6872 Livres 18 Sous 9 Den.
3 Livres	=	48 Pence.
240 Pence	=	£1 sterling.

Result as above.

GENEVA ON SPAIN.

Reduce 655 Dollars 7 Reals of plate into Geneva currency; exchange at 44 Sous current per Dollar of plate.

	Dollar		Sous		Dollars	Reals		Livres	Sous	Den.
As	1	:	44	: :	655	7	:	1442	18	6

8 8

8 5247

44

8)230868

2,0)2885,8½

1442 Livres 18 Sous 6 Den.

By the Chain Rule.

		655,875 Dollars.
1 Dollar	=	44 Sous.
20 Sous	=	1 Livre.

Result as above.

SPAIN ON GENEVA.

Reduce 1442 Livres 18 Sous 6 Deniers into Spanish money of plate; exchange at 44 Sous current per Dollar of plate.

	Sous		Dollar		Livres	Sous	Den.		Dollars	Reals
As	44	:	1	: :	1442	18	6	:	655	7

12 20

528 28858

12

Dollars Reals

528)346302(655 7

3168

2950 &c.

Remainder × 8 &c.

By the Chain Rule.

		1442,925 Livres.
1 Livre	=	20 Sous.
44 Sous	=	1 Dollar.

Result as above.

GENOA.

MONIES OF EXCHANGE.

Exchanges are computed in Lire, Soldi, and Denari di Lira; or in Pezze, Soldi, and Denari di Pezza; all in money fuori banco.

12 Denari = 1 Soldo; 20 Soldi = 1 Lira fuori banco; 5 Lire 15 Soldi fuori banco = 1 Pezza. The Pezza is also divided into 20 Soldi, or 240 Denari di Pezza: thus, 4 Pezze = 23 Lire; 4 Soldi di Pezza = 23 Soldi di Lira; 4 Denari di Pezza = 23 Denari di Lira.

Also, 4 Lire 12 Soldi fuori banco = 1 Scudo di cambio, or Crown of exchange; 10 Lire 16⅔ Soldi fuori banco = 1 Scudo d'oro, or gold Crown; 10 Lire 14 Soldi fuori banco = 1 Scudo d'oro marche.

COURSE OF EXCHANGE, from the Genoa Quotation. *March*, 1820.		EXPLANATION.	
AMSTERDAM	89	GENOA receives 89 Grotes Flemish....	for 1 Pezza of 5¾ Lire.
AUGSBURG	61½	——— gives 61½ Soldi fuori banco....	for 1 Florin current.
CONSTANTINOPLE.	16	——— gives 16 Soldi or 80 Centimes..	for 1 Piastre.
FRANCE	94⅓	——— receives 94⅓ Sous in Francs ..	for 1 Pezza of 5¾ Lire.
HAMBURGH	45⅓	——— gives 45⅓ Soldi fuori banco....	for 1 Mark banco.
LEGHORN	123	——— gives 123 Soldi fuori banco ..	for 1 Pezza of 8 Reals.
LISBON	868	——— receives 868 Rees	for 1 Pezza of 5¾ Lire.
LONDON	48	——— receives 48 Pence sterling	for Ditto.
DITTO	30	——— gives 30 Lire Italiane	for £1 sterling.
MILAN	87¼	——— receives 87¼ Soldi correnti	for 1 Scudo of 4 Lire fuori banco.
NAPLES	100	——— gives 100 Soldi fuori banco ..	for 1 Ducato di regno.
PALERMO.....	36½	——— receives 36½ Grani	for 1 Lira fuori banco.
DITTO	15	——— gives 15 Lire fuori banco.....	for 1 Oncia.
ROME	128	——— gives 128 Soldi fuori banco....	for 1 Roman Scudo.
SPAIN	617	——— receives 617 Maravedis of Plate	for 1 Scudo d'oro marche.
TRIESTE	61¼	——— gives 61¼ Soldi fuori banco....	for 1 Florin effective.
VENICE.....	34¼	——— receives 34¼ Soldi piccoli.....	for 1 Lira fuori banco.
VIENNA	61⅞	——— gives 61⅞ Soldi fuori banco ..	for 1 Florin effective.

[For the usances and other particulars relating to Bills of Exchange, see GENOA, vol. i.]

GENOA ON LONDON, see page 22.
GENOA ON AMSTERDAM, see page 29.
GENOA ON FRANCE, see page 50.

GENOA ON HAMBURGH.

Reduce 1789 Marks 10 Schillings 8 Pfenings Hamburgh banco into money of Genoa; exchange at 46½ Soldi di Lira per Mark banco.

Mark		Soldi		Marks	Sch.	Pf.		Lire	Soldi	Den.
As 1	:	46½	: :	1789	10	8	:	4160	19	6
16				16						
16				28634						
12				12						
192				343616						

46½

2,0)

192)15978144(8321,9 6

1536

618 &c.

4160 Lire 19 Sol. 6 Den.

By the Chain Rule.

1789 Marks 10 Sch. 8 Pf.

1 Mark = 46½ Soldi.

20 Soldi = 1 Lira.

Result as above.

LONDON ON GENOA, see page 22.
AMSTERDAM ON GENOA, see page 29.
FRANCE ON GENOA, see page 50.

HAMBURGH ON GENOA.

Reduce 4160 Lire 19 Soldi 6 Denari into Hamburgh money; exchange at 46½ Soldi di Lira per Mark banco.

Soldi		Mark		Lire	Soldi	Den.		Marks	Sch.	Pf.
As 46½	:	1	: :	4160	19	6	:	1789	10	8
12				20						
558				83219						
				12						
				998634						

Mks. Sch. Pf.

558)998634(1789 10 8

558

4406 &c.

Remainder × 16 × 12 &c.

By the Chain Rule.

4160 Lire 19 Soldi 6 Den.

1 Lira = 20 Soldi.

46½ Soldi = 1 Mark.

Result as above.

GENOA ON LEGHORN.

Reduce 210 Pezze 16 Soldi 8 Denari into money of Genoa; exchange at 124 Soldi fuori banco per Pezza of 8 Reals.

Pezza		Soldi		Pezze	Sol.	Den.		Lire	Soldi	Den.
As 1	:	124	: :	210	16	8	:	1307	3	4
20				20						
20				4216						
12				12						
240				50600						

124

-2,0)

240)6274400(2614,3

48

147 &c.

1307 Lire 3 Sol. 4 Den.

Remainder × 12 &c.

LEGHORN ON GENOA.

Reduce 1307 Lire 3 Soldi 4 Denari of Genoa into money of Leghorn; exchange at 124 Soldi fuori banco per Pezza of 8 Reals.

Soldi		Pezza		Lire	Sol.	Den.		Pezze	Sol.	Den.
As 124	:	1	: :	1307	3	4	:	210	16	8
12				20						
1488				26143						
				12						
				313720						

Pezze Sol. Den

1488)313720(210 16 8

2976

1612 &c.

Remainder × 20 × 12 &c.

GENOA ON LISBON.

Reduce 595 Milrees 184 Rees into money of Genoa; exchange at 736 Rees per Pezza of $5\frac{3}{4}$ Lire fuori banco.

Rees		Lire		Milrees		Lire	Sol.	Den.
As 736	:	$5\frac{3}{4}$	::	595,184	:	4649	17	6
				$5\frac{3}{4}$				

Lire Sol. Den.
736)3422308(4649 17 6
2944

4783 &c.

Remainder × 20 × 12 &c.

LISBON ON GENOA.

Reduce 4649 Lire 17 Soldi 6 Denari fuori banco into money of Portugal; exchange at 736 Rees per Pezza of $5\frac{3}{4}$ Lire fuori banco.

Lire	Soldi		Rees		Lire	Sol.	Denari		Mil.	Rees
As 5	15	:	736	::	4649	17	6	:	595	184
20					20					
115					92997					
12					12					
1380					1115970					
					736					

Milrees
138,0)82135392,0(595,184
690 &c.

GENOA ON NAPLES.

Reduce 1612 Ducati di regno into money of Genoa; exchange at $104\frac{1}{2}$ Soldi fuori banco per Ducat.

Duc.		Soldi		Duc.		Lire	Sol.
As 1	:	$104\frac{1}{2}$	::	1612	:	8422	14
				$104\frac{1}{2}$			

2,0)16845,4

8422 Lire 14 Soldi.

NAPLES ON GENOA.

Reduce 8422 Lire 14 Soldi fuori banco into money of Naples; exchange at $104\frac{1}{2}$ Soldi per Ducat.

Soldi		Duc.		Lire	Sol.		Duc.
As $104\frac{1}{2}$	:	1	::	8422	14	:	1612
12				20			
1254				168454			
				12			
				2021448			

Ducats
1254)2021448(1612

GENOA ON PALERMO.

Reduce 196 Oncie 24 Tari 2 Grani into money of Genoa; exchange at $34\frac{1}{2}$ Grani per Lira fuori banco.

Grani		Lira		Oncie	Tari	Gr		Lire	Sol.	Den.
As $34\frac{1}{2}$	:	1	::	196	24	2	:	3422	13	4
				30						
				5904						
				20						
				118082,0				3422	13	4

Lire Sol. Den.
34,5)118082,0(3422 13 4
1035

1458 &c.

PALERMO ON GENOA.

Reduce 3422 Lire 13 Soldi 4 Denari fuori banco into Sicilian money; exchange at $34\frac{1}{2}$ Grani per Lira fuori banco.

Lira		Gr.		Lire	Sol.	Den.		On.	Tari	Gr.
As 1	:	$34\frac{1}{2}$	::	3422	13	4	:	196	24	2
				20						
				68453						
				12						
				821440						
				$34\frac{1}{2}$						
				2,0)						
				24,0)2833968,0(11808,2						
				240						
				3,0)590,4						
				433 &c.						

196 On. 24 Tari 2 Gr.

GENOA ON SPAIN.

Reduce 468 Dollars 3 Reals 17 Maravedis of plate into money of Genoa; exchange at 640 Maravedis of plate per Scudo d'oro marche of 10 Lire 14 Soldi fuori banco.

	Mar.	Lire	Soldi		Dol.	Reals	Mar.		Lire	Soldi	Den.
As	640	10	14	::	468	3	17	:	2130	4	4
		20			8						
		214			3747						
					34						
					127415						
					214						

20)2726681,0(4260,4 4
256
166 &c.

2130 Lire 4 Soldi 4 Den.

By the Chain Rule.

468 Dol. 3 Reals 17 Mar.
1 Dollar = 272 Maravedis.
640 Marav. = 214 Soldi.
20 Soldi = 1 Lira.

Result as above.

SPAIN ON GENOA.

Reduce 2130 Lire 4 Soldi 4 Denari fuori banco into Spanish money; exchange at 640 Maravedis of plate per Scudo d'oro marche of 10 Lire 14 Soldi fuori banco.

	Lire	Soldi		Mar.		Lire	Sol.	Den.		Dol.	Reals	Mar.
As	10	14	:	640	::	2130	4	4	:	468	3	17
	20					20						
	214					42604						
	12					12						
	2568					511252						
						640						

34)327201280(127415
2568
7040 &c.

8)3747 17

468 Dol. 3 R. 17 M.

By the Chain Rule.

2130 Lire 4 Soldi 4 Den.
10 Lire 14 Soldi = 640 Maravedis.
272 Maravedis = 1 Dollar.

Result as above.

GENOA ON VENICE.

Reduce 4673 Lire 13 Soldi 8 Denari piccoli into money of Genoa; exchange at 38 Soldi piccoli per Lira fuori banco of Genoa.

	Soldi	Lira		Lire	Soldi	Den.		Lire	Soldi	Den.
As	38	1	::	4673	13	8	:	2459	16	8
	12			20						
	456			93473						
				12						
				1121684						

456)1121684(2459 16 8
912
2096 &c.

If the Exchanges between Genoa and Venice are transacted in Italian Livres, the operation becomes more simple.

VENICE ON GENOA.

Reduce 2459 Lire 16 Soldi 8 Denari of Genoa into money of Venice; exchange at 38 Soldi piccoli per Lira fuori banco.

	Lira		Soldi		Lire	Soldi	Den.		Lire	Soldi	Den.
As	1	:	38	::	2459	16	8	:	4673	13	8
	20				20						
	20				49196						
	12				12						
	240				590360						
					38						
					2243368,0						

24,0)2243368,0(9347,3 8
216
83 &c.

4673 Lire 13 Sol. 8 Den.

Remainder × 12 &c.

HAMBURGH.

MONIES OF EXCHANGE.

Exchanges are computed in Marks, Schillings, and Pfenings, banco or current; or in Pounds, Shillings, and Pence, Flemish banco.

Banco bears an agio on currency, which is generally from 20 to 25 per cent.

12 Pfenings = 1 Schilling, or Sol Lubs; 16 Schillings Lubs = 1 Mark; 3 Marks = 1 Rixdollar; 6 Pfenings = 1 Grote Flemish; 12 Grotes Flemish, or 6 Schillings Lubs = 1 Shilling Flemish; 20 Shillings Flemish, or 7½ Marks = 1 Pound Flemish.

COURSE OF EXCHANGE, From the Hamburgh Quotation. *January*, 1820.		EXPLANATION.	
AMSTERDAM.. 106	HAMBURGH	receives 106 Rixdollars Dutch currency.	for 100 Rixdollars.
AUGSBURG .. 148½	———	receives 148½ Rixdollars effective	for 100 Rixds. banco.
BASIL 25⅛	———	gives 25⅛ Schillings banco	for 1 Ecu of 3 Francs.
BRESLAU 41	———	receives 41 Rixdollars Prussian currency	for 100 Rixds. banco.
COPENHAGEN. 149	———	receives 149 Rixdollars Danish	for 100 Rixds. banco.
FRANCE..... 25⅞	———	gives 25⅞ Schillings banco	for 1 Ecu of 3 Francs.
FRANCFORT .. 148½	———	receives 148½ Rixdollars effective	for 100 Rixds. banco.
GENOA 80	———	gives 80 Grotes Flemish banco	for 1 Pezza of 5¾ Lire f. b.
LEGHORN 86½	———	gives 86½ Grotes Flemish banco.....	for 1 Pezza of 8 Reals.
LISBON 37	———	gives 37 Grotes Flemish banco	for 1 old Crusade.
LONDON 35 9	———	gives 35 Shillings & 9 Pence Flemish bco	for £1 sterling.
PRAGUE 149	———	receives 149 Rixdollars effective	for 100 Rixds. banco.
SPAIN 84¾	———	gives 84¾ Grotes Flemish banco	for 1 Ducat of Plate.
VENICE..... 82	———	receives 82 Soldi Piccoli.....	for 1 Mark banco.
VIENNA..... 149	———	receives 149 Rixdollars effective	for 100 Rixds. banco.

[For the usances, laws, &c. of Bills of Exchange, see HAMBURGH, vol. i.]

HAMBURGH ON LONDON, see page 23.
HAMBURGH ON AMSTERDAM, see page 30.
HAMBURGH ON AUGSBURG, see page 34.
HAMBURGH ON BERLIN, see page 37.
HAMBURGH ON BREMEN, see page 39.
HAMBURGH ON COPENHAGEN, see page 46.
HAMBURGH ON DANTZIC, see page 48.
HAMBURGH ON FRANCE, see page 50.
HAMBURGH ON FRANCFORT, see page 56.
HAMBURGH ON GENEVA, see page 59.
HAMBURGH ON GENOA, see page 62.

LONDON ON HAMBURGH, see page 23.
AMSTERDAM ON HAMBURGH, see page 30.
AUGSBURG ON HAMBURGH, see page 34.
BERLIN ON HAMBURGH, see page 37.
BREMEN ON HAMBURGH, see page 39.
COPENHAGEN ON HAMBURGH, see page 46.
DANTZIC ON HAMBURGH, see page 48.
FRANCE ON HAMBURGH, see page 50.
FRANCFORT ON HAMBURGH, see page 56.
GENEVA ON HAMBURGH, see page 59.
GENOA ON HAMBURGH, see page 62.

HAMBURGH ON LEGHORN.

Reduce 527 Pezze 8 Soldi 8 Denari into Hamburgh money; exchange at 84¾ Grotes Flemish per Pezza of 8 Reals.

Pezza		Grotes		Pezze	Soldi	Den.		Marks	Schillings.
As 1	:	84¾	::	527	8	8	:	1396	14
20				20					
20				10548					
12				12					
240				126584					

84¾
32)
24,0)1072799,4(44699,9 Grotes Flemish.
96
112 &c.
1396 Mks. 14 Sch.

By the Chain Rule.

527 Pezze 8 Soldi 8 Denari.
1 Pezza = 84¾ Grotes Flemish.
32 Grotes = 1 Mark.

Result as above.

LEGHORN ON HAMBURGH.

Reduce 1396 Marks 14 Schillings banco into money of Leghorn; exchange at 84¾ Grotes Flemish banco per Pezza of 8 Reals.

Grotes		Pezza		Marks	Sch.		Pezze	Soldi	Denari.
As 84¾	:	1	::	1396	14	:	527	8	8
6·				16					
508½				22350					
2				12					
1017				268200					

2
1017)536400(527 Pezze 8 Soldi 8 Den.
5085
2790 &c.

By the Chain Rule.

1396 Marks 14 Schillings.
1 Mark = 32 Grotes Flemish.
84¾ Grotes = 1 Pezza.

Result as above.

HAMBURGH ON LISBON.

Reduce 234 Mil. 743 Rees into Hamburgh money; exchange at 43¾ Grotes Flemish banco per old Crusado.

Milrees
4,00)2347,43

586,857 Crusados.

Crus.		Grotes		Crus.		Marks	Sch.	Pf.
As 1	:	43¾	: :	586,857	:	802	5	6
				43¾				

Marks Sch. Pf.
32)25674,993(802 5 6
256

74 &c.

Remainder × 16 × 12 &c.

LISBON ON HAMBURGH.

Reduce 802 Marks 5 Schillings 6 Pfenings banco into money of Portugal; exchange at 43¾ Grotes Flemish banco per old Crusado.

Grotes		Crus.		Marks	Sch.	Pf.		Crus.
As 43¾	:	1	: :	802	5	6	:	586,857
6				16				
262½				12837				
2				12				
525				154050				
				2				

Crusados.
525)308100(586,857
2625

4560 &c.

But if the answer be required in Milrees and Rees, the Crusados should be multiplied by 400.

HAMBURGH ON SPAIN.

Reduce 357 Dollars 4 Reals 10 Maravedis of plate into Hamburgh money; exchange at 83¾ Grotes Flemish banco per Ducat of exchange of 375 Maravedis.

Mar.		Grotes		Doll.	Reals	Mar.		Marks	Sch.	Pf.
As 375	:	83¾	: :	357	4	10	:	678	11	7
				8						
				2860						
				34						
				97250						
				83¾						

32)
375)8144687½(21719 1/6

678 Mks. 23 1/6 Grotes.
6

12)139

11 Sch. 7 Pf.

SPAIN ON HAMBURGH.

Reduce 678 Marks 11 Schillings 7 Pfenings banco into Spanish money; exchange at 83¾ Grotes Flemish banco per Ducat of exchange.

Grotes		Mar.		Marks	Sch.	Pfen.		Doll.	Reals	Mar.
As 83¾	:	375	: :	678	11	7	:	357	4	10
6				16						
502½				10859						
				12						
				130315						
				375						

-34) 8)
502,5)48868125,0(97250 (2860 Rls. 10 M.
45225 68

36431 &c. 292 &c. 357 Dols. 4 R.

HAMBURGH ON VENICE.

Reduce 21461 Lirc 18 Soldi 7 Denari Piccoli into Hamburgh money; exchange at 78½ Grotes per Ducat banco of 9 Lire 12 Soldi Piccoli.

Duc.	Soldi		Grotes		Lire Pic.	Soldi	Den.		Marks	Sols
As 1 or	192	:	78½	: :	21461	18	7	:	5484	4
	12				× 20	× 12				
	2304				5150863					
					78,5					
					—32)					
					2304)404341945,5(1754956					

5484 Marks 4 Sch.

If the Venetian sum to be reduced into Hamburgh money be in Lire Italiane, it must be first reduced into Lire Piccole; thus—

Lire It.		Lire Pic.		Lire It.		Lire Pic.	Soldi	Den.
As 240	:	469	: :	10982,65	:	21461	18	7

VENICE ON HAMBURGH.

Reduce 5484 Marks 4 Sols Lubs into Venetian money; exchange at 78½ Grotes per Ducat.

Grotes		Ducat			Marks	Sols		Lire	Sol.	Den.
As 78½	:	1	:	:	5484	4	:	21461	18	7
2		9 12			32					
157		9 12			350992					
					9	12				
					3158928					
				10 = ½....	175496					
				2 = ⅕....	35099	4				
					157)3369523	4(		21461	18	7

If the result be required in Lire Italiane, say—

Lire Pic.		Lire It.		Lire	Sol.	Den.		Lire It.	Cent.
As 469	:	240	: :	21461	18	7	:	10982	65

HAMBURGH ON VIENNA.

Reduce 2719 Rixdollars 41 Creutzers effective of Vienna into Hamburgh money; exchange at 149$\frac{1}{10}$ Rixdollars effective for 100 Rixdollars banco.

Rxds. Eff.		Rxd. Bco.		Rxd. Eff.	Cr.		Marks	Sols Lubs.
As 149,1	:	100	: :	2719	41	:	5471	12
90		3		90				
13419,0		300		244751				
				300				
				13419(73425300(5471			Marks	Sch. 12

Effective money is reduced to paper money at an agio of so much per cent.

Reduce 2719 Rixdollars 41 Creutzers effective into paper money; agio 66⅔ per cent.

			Rxd Eff.	Cr.		Paper Money.
As 33⅓	:	100	: :	2719	41	: 8117,70

Paper money is reduced to effective by the reverse analogy: thus—

As 100 : 33⅓ : : 8117,70 : 2719 41

VIENNA ON HAMBURGH.

Reduce 5471 Marks 12 Sols Lubs into effective money; exchange at 149$\frac{1}{10}$ Rixdollars effective for 100 Rixdollars banco.

Rxds. bco.		Rxds. Eff.		Marks		Rxds. Eff.	Cr.
As 100	:	149,1	: :	5471,75	:	2719	41
3				149,1			
300				300)815837925(2719,459			
				600			90
				2158 &c.			41,310

Effective money is reduced to paper, and the contrary, by the analogies in the annexed examples.

LEGHORN.

MONIES OF EXCHANGE.

Exchanges are computed here in Pezze, Soldi, and Denari di Pezza.

12 Denari di Pezza=1 Soldo di Pezza; 20 Soldi di Pezza=1 Pezza, commonly called Pezza of 8 Reals. 12 Denari di Lira=1 Soldo di Lira; 20 Soldi di Lira=1 Lira. 24 Lire moneta lunga=23 Lire moneta buona. 6 Lire moneta lunga, or 5¾ Lire moneta buona=1 Pezza of 8 Reals.

COURSE OF EXCHANGE, From the Leghorn Quotation. *February*, 1820.		EXPLANATION.	
Amsterdam 96	.. Leghorn	receives 96 Grotes Flemish	for 1 Pezza.
Ancona 129¼	.. ————	receives 129¼ Bajocchi	for 1 Pezza of 8 Reals.
Augsburg 201½	.. ————	receives 201½ Florins current....	for 100 Pezze.
Bologna 94	.. ————	receives 94 Bolognini	for 1 Pezza.
Constantinople 296	.. ————	receives 296 Paras	for 100 Pezze.
Florence 123	.. ————	receives 123 Soldi	for 1 Pezza.
France 102	.. ————	receives 102 Sous in Francs	for 1 Ditto.
Geneva 109	.. ————	receives 109 Ecus of 3 Livres ..	for 100 Pezze.
Genoa 123	.. ————	receives 123 Soldi fuori banco ..	for 1 Pezza.
Hamburgh 87¼	.. ————	receives 87¼ Grotes Flemish banco	for 1 Ditto.
Lisbon 930	.. ————	receives 930 Rees	for 1 Ditto.
London 48¾	.. ————	receives 48¾ Pence sterling	for 1 Ditto.
Malta 30½	.. ————	receives 30½ Tari	for 1 Ditto.
Milan..... 134	.. ————	receives 134 Soldi Correnti	for 1 Ditto.
Naples 123¼	.. ————	receives 123¼ Ducati di regno . .	for 100 Pezze of 8 Reals.
Novi 187	.. ————	gives 187 Pezze	for 1 Scudo d'oro marche.
Odessa 510	.. ————	receives 510 Rubles	for 100 Pezze.
Palermo 12 3	.. ————	receives 12 Tari 3 Grani	for 1 Pezza.
Petersburgh .. 490	.. ————	receives 490 Rubles	for 100 Pezze.
Rome 128	.. ————	receives 128 Bajocchi	for 1 Pezza.
Smyrna 296	.. ————	receives 296 Paras	for 1 Ditto.
Spain 136	.. ————	receives 136 Pesos of old plate . .	for 100 Pezze.
Trieste 200½	.. ————	gives 200½ Soldi moneta buona . .	for 1 Florin current.
Turin 90½	.. ————	receives 90½ Soldi	for 1 Pezza.
Venice 10½	.. ————	receives 10½ Lire piccoli	for Ditto.
Vienna 201½	.. ————	gives 201½ Soldi moneta buona . .	for 1 Florin current.

[For the usances and other particulars relating to Bills of Exchange, see Leghorn, vol. i.]

LEGHORN ON LONDON, see page 23.
LEGHORN ON AMSTERDAM, see page 30.
LEGHORN ON FRANCE, see page 51.
LEGHORN ON GENOA, see page 62.
LEGHORN ON HAMBURGH, see page 66.

LEGHORN ON LISBON.

Reduce 304 Milrees 205 Rees into money of Leghorn; exchange at 825 Rees per Pezza of 8 Reals.

Rees		Pezza		Milrees		Pezza	Sol.	Den.
As 825	:	1	: :	304,205	:	368	14	8

825)304,205(368 14 8
2475
5670 &c.

Remainder × 20 × 12 &c.

If the sum were given in Crusados, they should be first reduced to Rees by multiplying them by 400: thus, reduce 760 Crusados 205 Rees into money of Leghorn; exchange as above.

760 205
400
304000
205
304,205 Rees.

LONDON ON LEGHORN, see page 23.
AMSTERDAM ON LEGHORN, see page 30.
FRANCE ON LEGHORN, see page 51.
GENOA ON LEGHORN, see page 62.
HAMBURGH ON LEGHORN, see page 66.

LISBON ON LEGHORN.

Reduce 368 Pezze 14 Soldi 8 Denari into money of Portugal; exchange at 825 Rees per Pezza of 8 Reals.

Pezza		Rees		Pezze	Soldi	Den.		Milrees	Recs
As 1	:	825	: :	368	14	8	:	304	205
20				20					
20				7374					
12				12					
240				88496					
				825					

Mil.
24,0)7300920,0(304,205
72
100 &c.

If the answer were required in Crusados, divide 304,000 by 400 and annex 205 Rees which will give 760 Crusados 205 Rees.

LEGHORN ON NAPLES.

Reduce 425 Ducati 2 Grani di regno into money of Leghorn; exchange at 118½ Ducati di regno per 100 Pezze.

Ducats		Pezze		Ducats		Pezze	Soldi	Den.
As 118½	:	100	: :	425,02	:	358	13	4
2				100				
237				42502				
				2				

Pezze Sol. Den.
237)85004(358 13 4
711 &c.

Remainder × 20 × 12 &c.

By Decimals.

Ducats		Pezze		Ducats		Pezze
As 118,5	:	100	: :	425,02	:	358,667
						20
						13,340 Soldi
						12
						4,08 Den.

NAPLES ON LEGHORN.

Reduce 358 Pezze 13 Soldi 4 Denari into money of Naples; exchange at 118½ Ducati di regno per 100 Pezze of 8 Reals.

Pezze		Ducats		Pezze	Soldi	Den.		Duc.	Gr.
As 100	:	118½	: :	358	13	4	:	425	2
20				20					
2000				7173					
12				12					
24000				86080					
				118½					

24,000)10200,480(425,02

By Decimals.

13 Soldi 4 Den. = ,667

Pezze		Ducats		Pezze		Ducats
As 100	:	118,5	: :	358,667	:	425,02
				118,5		
				1,00)425,02,0395		

LEGHORN ON PALERMO.

Reduce 567 Oncie 10 Tari 4 Grani into money of Leghorn; exchange at 12 Tari 10 Grani per Pezza of 8 Reals.

	Tari	Gr.		Pezza			Oncie	Tari	Gr.		Pezze	Soldi	Den.
As	12	10	:	1	: :		567	10	4	:	1361	12	4
	20						30						
	250						17020						
							20						
							34040,4				1361	12	4
							25						
							90 &c.						

By the Chain Rule.

567 Oncie 10 Tari 4 Grani.

1 Oncia = 30 Tari.

12½ Tari = 1 Pezza.

Result as above.

PALERMO ON LEGHORN.

Reduce 1361 Pezze 12 Soldi 4 Denari into Sicilian money; exchange at 12 Tari 10 Grani per Pezza of 8 Reals.

	Pezza		Tari			Pezze	Soldi	Den.		Oncie	Tari	Gr.
As	1	:	12½	: :		1361	12	4	:	567	10	4
						20						
						27232						
						12						
						326788						
						12½						
						30)						
						24,0)408485,0(1702,0						
						24						
						168 &c.				567 On. 10 Tari 4 Gr.		

By the Chain Rule.

1361 Pez. 12 Sol. 4 Den.

1 Pezza = 12½ Tari.

30 Tari = 1 Oncia.

Result as above.

LEGHORN ON SPAIN.

Reduce 1210 Dollars 5 Reals 10 Maravedis of plate into money of Leghorn; exchange at 129½ Dollars of plate per 100 Pezze of 8 Reals.

	Doll.		Pezze		Dollars	Reals	Mar.		Pezze	Soldi	Den.
As	129½	:	100	: :	1210	5	10	:	934	17	6
	8				8						
	1036				9685						
	34				34						
	35224				35224)32930000(934				17	6	
					317016 &c.						

By Decimals.

5 Reals 10 Marav. = $\frac{180}{272}$ = ,662.

	Dollars		Pezze		Dollars		Pezze
As	129,5	:	100	: :	1210,662	:	934,874
							20
							17,480
							12
							5,76

SPAIN ON LEGHORN.

Reduce 934 Pezze 17 Soldi 6 Denari into Spanish money; exchange at 129½ Dollars of plate per 100 Pezze of 8 Reals.

	Pezze		Dollars		Pezze	Sol.	Den.		Dollars	Reals	Mar.
As	100	:	129½	: :	934	17	6	:	1210	5	10
					20						
					18697						
					12						
					224370						
					129,5						
					24,000)29055,915(1210,663						
					24						8
					50 &c.						5,304
											34
											10,336

LISBON.

MONIES OF EXCHANGE.

Exchanges are computed here in Milrees and Rees; and also in old Crusados.

1000 Rees = 1 Milree; 400 Rees = 1 old Crusado, or Crusado of exchange; 480 Rees = 1 new Crusado.

Three sorts of money are at present used in Portugal; namely,—*Effective Money*, that is, specie; *Paper Money*, which is at a discount; and *Legal Money*, consisting of half specie and half paper. The discount in Feb. 1820, was 22 per cent.

COURSE OF EXCHANGE, From the Lisbon Quotation. *February*, 1820.		EXPLANATION.		
Amsterdam..	42	.. Lisbon	rceeives 42 Grotes Flemish ..	for 1 old Crusado.
France.....	540	.. ———	gives 540 Rees	for 3 Francs.
Genoa	746	.. ———	gives 746 Rees	for 1 Pez. of 5¾ Lire fuori banco.
Hamburgh ..	38	.. ———	receives 38 Grotes Flemish bco.	for 1 old Crusado.
Leghorn	810	.. ———	gives 810 Rees	for 1 Pezza of 8 Reals.
London.....	53	.. ———	receives 53 Pence sterling....	for 1 Milree.
Spain 2700		.. ———	gives 2700 Rees	for 1 Doubl. of plate or Pistole of ex.
Trieste	450	.. ———	gives 450 Rees	for 1 Florin current.
Venice.....	66	.. ———	gives 66 Rees	for 1 Lira Piccola.
Vienna.....	450	.. ———	gives 450 Rees	for 1 Florin current.

[For the usances and other particulars relating to Bills of Exchange, see Lisbon, vol. i.]

PAPER MONEY REDUCED TO EFFECTIVE.

Paper money is reduced to effective by saying: as 100 is to 100 less the discount, so is the sum in paper to the sum effective.

Reduce 277 Mil. 240 Rees in paper to effective; the discount being 12½ per cent.

	R. Paper	R. Effective		R. Paper	R. Effective
As	100	87½	::	277,240	242,585

EFFECTIVE MONEY REDUCED TO PAPER.

Effective money is reduced to paper by reversing the foregoing operation: that is, as 100 less the discount is to 100, so is the sum effective to the sum in paper.

Reduce 242 Mil. 585 Rees effective into paper; discount at 12½ per cent.

	R. Effective	R. Paper		R. Effective	R. Paper
As	87½	100	::	242,585	277,240

LEGAL MONEY REDUCED TO EFFECTIVE.

As legal money consists of half paper and half effective, it is reduced to effective by saying: as 100 is to 100 less half the discount, so is the sum in legal money to the sum in effective.

Reduce 28 Mil. 640 Rees legal money to effective; the discount on paper against effective money being 15 per cent.

				R. Legal	R. Effective
As	100	92½	::	28,640	26,492

EFFECTIVE MONEY REDUCED TO LEGAL.

Effective money is reduced to legal by reversing the foregoing operation: that is, as 100 less half the discount is to 100, so is the sum in effective to the sum in legal money.

Reduce 26 Mil. 492 Rees effective to legal money; the discount on paper against effective money being 15 per cent.

				R. Effective	R. Legal
As	92½	100	::	26,492	28,640

PAPER MONEY REDUCED TO LEGAL.

In order to reduce paper money to legal, it should be first reduced to effective, as above. Then, as 100 less half the discount is to 100, so is the sum in effective to the sum in legal money.

Reduce 232 Mil. 650 Rees paper money to legal; discount on paper being 20 per cent.

				Paper	Effective
As	100	80	::	232,650	186,120

				Effective	Legal
And as	90	100	::	186,120	206,800

Or the above question may be performed by a single statement: thus, as 90 is to 80, so is paper to legal money; that is, as 100 less half the discount is to 100 less the whole discount, so is paper to legal money.

LEGAL MONEY REDUCED TO PAPER.

Legal money is reduced to paper by reversing the foregoing statement: that is, as 100 is to 100 less half the discount, so is the sum in legal money to the sum in effective; and this is reduced to paper as above.

Reduce 206 Mil. 800 Rees legal money to paper: the discount on paper being 20 per cent.

				Legal	Effective
As	100	90	::	206,800	186,120

				Effective	Paper
And as	80	100	::	186,120	232,650

Or the above question may be performed by a single statement: thus, as 100 less the whole discount is to 100 less half the discount, so is the given sum in legal money to the sum in paper.

LISBON ON LONDON, see page 24.
LISBON ON AMSTERDAM, see page 31.
LISBON ON FRANCE, see page 51.
LISBON ON GENOA, see page 63.
LISBON ON HAMBURGH, see page 67.
LISBON ON LEGHORN, see page 70.

LISBON ON NAPLES.

Reduce 232 Ducats 6 Grains into Portugal money; exchange at 684 Rees per Ducato di regno.

	Duc.		Rees		Ducats		Milrees	Rees
As	1	:	684	: :	232,06	:	158	729
					684			
					1,000)158,729,04(		Mil. 158	Rees 729

LONDON ON LISBON, see page 24.
AMSTERDAM ON LISBON, see page 31.
FRANCE ON LISBON, see page 51.
GENOA ON LISBON, see page 63.
HAMBURGH ON LISBON, see page 67.
LEGHORN ON LISBON, see page 70.

NAPLES ON LISBON.

Reduce 158 Mil. 729 Rees into money of Naples; exchange at 684 Rees per Ducato di regno.

	Rees		Ducat		Rees		Ducats	Gr.
As	684	:	1	: :	158,729	:	232	6

684)158729(232,06
1368
2192 &c.

LISBON ON PALERMO.

Reduce 79 Oncie 11 Tari 12½ Grani into Portugal money; exchange at 5 Tari 16 Grani per old Crusado.

	Tari	Gr.		Rees		On.	Tari	Gr.		Mil.	Rees
As	5	16	:	400	: :	79	11	12½	:	164	250
	20					30					
	116					2381					
						20					
						47632½					
						400					
						116)19053000(				Mil. 164	Rees 250

By the Chain Rule.

		79,3875 Oncie.
1 Oncia	=	30 Tari.
5,8 Tari	=	400 Rees.

Result as above.

PALERMO ON LISBON.

Reduce 164 Mil. 250 Rees into Sicilian money; exchange at 5 Tari 16 Grani per old Crusado.

	Rees		Tari	Gr.		Rees		On.	Tari	Gr.
As	400	:	5	16	: :	164,250	:	79	11	12½
			20			116				
			116			4,00)190530,00				
						2,0)4763,2½				
						3,0)238,1	12½			

79 On. 11 Tari 12½ Gr.

By the Chain Rule.

		164,250 Milrees.
400 Rees	=	5,8 Tari.
30 Tari	=	1 Oncia.

Result as above.

LISBON ON SPAIN.

Reduce 140 Dollars 3 Reals 18 Maravedis of plate into Portugal money; exchange at 2312 Rees per Doubloon of exchange of 4 Dollars of plate.

	Dollars	Rees		Dollars	Reals	Mar.		Mil.	Rees
As	4	2,312	::	140	3	18	:	81	175
	8			8					
	32			1123					
	34			34					
	1088			1088)88318400(81				175	
				8704					
				1278 &c.					

By the Chain Rule.

		140 Doll. 3 Reals 18 Mar.
4 Dollars	=	1 Doub. of exchange.
1 Doubloon	=	2312 Rees.

Result as above.

SPAIN ON LISBON.

Reduce 81 Mil. 175 Rees into Spanish money; exchange at 2312 Rees per Doubloon of exchange.

	Rees	Dollars	Mil. Rees	Doll.	Reals	Marav.
As	2,312	: 4 ::	81,175	: 140	3	18
			4			
			2312)324700(140		3	18
			2312			
			9350			
			9248			
			1020 &c.			

Remainder × 8 × 34 &c.

By the Chain Rule.

		81 Mil. 175 Rees.
2312 Rees	=	1 Doubloon.
1 Doubloon	=	4 Dollars.

Result as above.

LISBON ON VENICE.

Reduce 204 Lire 3 Soldi 7 Denari Piccoli into Portugal money; exchange at 67 Rees per Lira Piccola.

	Lira	Rees		Lire	Sol.	Den.		Rees
As	1	67	::	204	3	7	:	13,680
	20			20				
	20			4083				
	12			12				
	240			49003				
				67				
				24,0)328320,1(13,680				
				24				
				88 &c.				

VENICE ON LISBON.

Reduce 13,680 Rees into Venetian money; exchange at 67 Rees per Lira Piccola.

	Rees	Lira	Rees	Lire	Sol.	Den.
As	67	: 1 ::	13,680	: 204	3	7
			67)13,680(204	3	7	
			134			
			280			
			268			
			12 &c.			

Remainder × 20 × 12 &c.

LEIPSIC.

The monies of exchange and calculations for Leipsic are the same as those for *Berlin*, page 35.

MILAN.

MONIES OF EXCHANGE.

Exchanges are computed here in Lire, Soldi, and Denari correnti or imperiali.

12 Denari = 1 Soldo; 20 Soldi = 1 Lira.
106 Soldi or Lire imperiali = 150 Soldi or Lire correnti.
106 Soldi imperiali, or 150 Soldi correnti = 1 Filippo.
117 Soldi imperiali = 1 Scudo or Crown.

COURSE OF EXCHANGE, From the Milan Quotation. *January*, 1820.		EXPLANATION.	
Amsterdam . 56	.. Milan	gives 56 Soldi correnti	for 1 Florin.
Augsburg . . 66	.. ———	gives 66 Ditto	for 1 Florin current.
France 55	.. ———	gives 55 Soldi imperiali	for 3 Francs.
Genoa 86	.. ———	gives 86 Soldi correnti	for 4 Lire fuori banco.
Hamburgh . . 49	.. ———	gives 49 Ditto	for 1 Mark banco.
Leghorn . . .132	.. ———	gives 132 Ditto	for 1 Pezza of 8 Reals.
London 32 15	.. ———	gives 32 Lire 15 Soldi correnti . .	for £1 sterling.
Naples 108	.. ———	gives 108 Soldi correnti	for 1 Ducato di regno.
Rome 138	.. ———	gives 138 Ditto	for 1 Scudo Romano.
Venice 96	.. ———	gives 96 Ditto	for 1 Ducat current.
Vienna 67⅞	.. ———	gives 67⅞ Ditto	for 1 Florin current.

[For the usances and other particulars relating to Bills of Exchange, see Milan, vol. i.]

MILAN ON AMSTERDAM.

Reduce 717 Florins 5 Stivers into money of Milan; exchange at 57 Soldi current per Florin.

	Florin		Soldi		Florins	Stivers		Lire	Soldi	Den.
As	1	:	57	: :	717	5	:	2044	3	3
	20				20					
	20				14345					
					57					
					2,0)81766,5					
					2,0)40883,25					

2044 Lire 3,25 Soldi
12
3,00

By the Chain Rule.

717,25 Florins.

1 Florin	=	57 Soldi.
20 Soldi	=	1 Lira.

Result as above.

AMSTERDAM ON MILAN.

Reduce 2044 Lire 3 Soldi 3 Denari current of Milan into Dutch money; exchange at 57 Soldi current per Florin.

	Soldi		Florin		Lire	Soldi	Den.		Florins	Stivers
As	57	:	1	: :	2044	3	3	:	717	5
	12				20					
	684				40883					
					12					
					684)490599(717			Fl.	Sti.	5
					4788					
					1179 &c.					

By the Chain Rule.

2044,1625 Lire.

1 Lira	=	20 Soldi.
57 Soldi	=	1 Florin.

Result as above.

MILAN ON GENOA.

Reduce 3559 Lire 9 Soldi 4 Denari fuori banco into money of Milan; exchange at 85 Soldi current of Milan for 4 Lire fuori banco of Genoa.

	Lire		Soldi		Lire	Sol.	Den		Lire	Sol.	Den.
As	4	:	85	: :	3559	9	4	:	3781	18	8
	20		12		20						
	80		1020		71189						
	12				12						
	960				854272						
					1020						
					96,0)87135744,0(907664						
					864						
					735 &c.						
					2,0)7563,8		8				
					3781 Lire 18 Sol. 8 Den.						

GENOA ON MILAN.

Reduce 3781 Lire 18 Soldi 8 Denari of Milan into money of Genoa; exchange at 85 Soldi current of Milan for 4 Lire fuori banco of Genoa.

	Soldi		Lire		Lire	Soldi	Den.		Lire	Sol.	Den.
As	85	:	4	: :	3781	18	8	:	3559	9	4
	12				20						
	1020				75638						
					12						
					907664						
					4						
					102,0)363065,6(3559			Lire	Sol.	Den.	
					306						
					570 &c.						

MILAN ON HAMBURGH.

Reduce 901 Marks 15 Schillings 4 Pfenings banco into money of Milan; exchange at 48 Soldi current per Mark banco.

	Mark		Soldi		Marks	Sch.	Pfen.		Lire	Soldi
As	1	:	48	::	901	15	4	:	2164	14
	16				16					
	16				14431					
	12				12					
	192				173176					
					48					
					2,0					

192)8312448(43294
768
632 &c.

2164 Lire 14 Soldi.

HAMBURGH ON MILAN.

Reduce 2164 Lire 14 Soldi current into money of Hamburgh; exchange at 48 Soldi current per Mark banco.

	Soldi		Mark		Lire	Soldi		Mks.	Sch.	Pf.
As	48	:	1	::	2164	14	:	901	15	4
					20					
					43294					

Mks Sch. Pf.
48)43294(901 15 4
432
94
48
46

Remainder × 16 × 12 &c.

MILAN ON LEGHORN.

Reduce 1233 Pezze 11 Soldi 8 Denari into money of Milan; exchange at 135 Soldi of Milan per Pezza of 8 Reals.

	Pezza		Soldi		Pezze	Soldi	Den.		Lire	Soldi	Den.
As	1	:	135	::	1233	11	8	:	8326	13	9
			12		20						
			1620		24671						
					12						
					296060						
					1620						
					12						

24,0)47961720,0(1998405
24
239 &c.

2,0)16653,3 9

8326 Lire 13 Sol. 9 Den.

LEGHORN ON MILAN.

Reduce 8326 Lire 13 Soldi 9 Denari of Milan into money of Leghorn; exchange at 135 Soldi per Pezza of 8 Reals.

	Soldi		Pezza		Lire	Soldi	Den.		Pezze	Sol.	Den.
As	135	:	1	::	8326	13	9	:	1233	11	8
	12				20						
	1620				166533						
					12						
					199840,5						

Pezze Sol. Den.
162,0)199840,5(1233 11 8
162
378 &c.

MILAN ON LONDON.

Reduce £143 8s. 2d. sterling into money of Milan; exchange at 31 Lire 10 Soldi current per £ sterling.

£	Lire	Soldi		£	s.	d.		Lire	Soldi	Den.
As 1	: 31	10	::	143	8	2	:	4517	7	3
20				20						
20				2868						
12				12						
240				34418						
				31½						

Lire Soldi Den.
240)1084167(4517 7 3
960
1241 &c.

LONDON ON MILAN.

Reduce 4517 Lire 7 Soldi 3 Denari current of Milan into sterling; exchange at 31 Lire 10 Soldi per £ sterling.

Lire	Soldi		£		Lire	Soldi	Den.		£	s.	d.
As 31	10	:	1	::	4517	7	3	:	143	8	2
20					20						
630					90347						
12					12						
7560					1084167						

£ s. d.
756,0)108416,7(143 8 2
756
3281 &c.

Remainder × 20 × 12 &c.

MILAN ON ROME.

Reduce 2007 Scudi 31¼ Bajocchi into money of Milan; exchange at 136 Soldi of Milan per Scudo.

Scudo	Soldi		Scudi	Baj.		Lire	Soldi	Den.
As 1	: 136	::	2007	31,25	:	13649	14	6
				136				
				2,0)27299,4,5000				

13649 Lire 14,5 Soldi

ROME ON MILAN.

Reduce 13649 Lire 14 Soldi 6 Denari into Roman money; exchange at 136 Soldi of Milan per Roman Scudo or Crown.

Soldi	Scudo		Lire	Soldi	Den.		Scudi	Baj.
As 136	: 1	::	13649	14	6	:	2007	31¼
12			20					
1632			272994					
			12					
			3275934					

Scudi Baj.
1632)3275934(2007 31,25
3264
11934 &c.

N.B. Milan, like many other parts of Italy, exchanges occasionally in Italian Livres, and the estimated proportion is that 27 Lire of Milan are worth 20,723 French Francs or Lire Italiane.

NAPLES.

MONIES OF EXCHANGE.

Exchanges are computed here in Ducats of 100 Grains.

10 Grani = 1 Carlino; and 10 Carlini = 1 Ducato di regno.

COURSE OF EXCHANGE, From the Naples Quotation. *January*, 1820.				EXPLANATION.
Amsterdam	51	25	Naples	gives 51 Grains 25 Centimes . for 1 Florin.
Ancona	125	50	———	gives 125 Grains 50 Centimes . for 1 Scudo.
Augsburg	61	35	———	gives 61 Grains 35 Centimes . . for 1 Florin current.
Florence	19	90	———	gives 19 Grains 90 Centimes . . for 1 Lira Fiorentine.
France	24	25	———	gives 24 Grains 25 Centimes . . for 1 Franc.
Ditto	433		———	receives 433 Centimes . . . . . for 1 Ducat.
Genoa	19	90	———	gives 19 Grains 90 Centimes . . for 1 Lira fuori banco.
Ditto	101⅓		———	receives 101⅓ Soldi fuori banco for 1 Ducat.
Hamburgh	44	10	———	gives 44 Grains 10 Centimes . . for 1 Mark banco.
Leghorn	122	75	———	gives 122 Grains 75 Centimes . for 1 Pezza of 8 Reals.
Lisbon	53	80	———	gives 53 Grains 80 Centimes . . for 1 Crusado of 400 Rees.
Ditto	670		———	receives 670 Rees . . . . . for 1 Ducat.
London	604		———	gives 604 Grains . . . . . for 1 £ sterling.
Milan	18	30	———	gives 18 Grains 30 Centimes . for 1 Lira corrente.
Ditto	113		———	receives 113 Soldi correnti . . . for 1 Ducat.
Palermo	120¾		———	gives 120 Grains 75 Centimes . for 1 Scudo of 12 Tari. or 120⅞ Ducats . . . . . for 100 Sicilian Scudi.
Rome	127		———	gives 127 Ducats . . . . . for 100 Scudi Romani.
Spain	121		———	gives 121 Grains . . . . . for 1 Dollar of Plate.
Trieste	61	25	———	gives 61 Grains 25 Centimes . for 1 Florin of Augsburg.
Venice	22	90	———	gives 22 Grains 90 Centimes . for 1 Italian Livre.
Vienna	61	50	———	gives 61 Grains 50 Centimes . for 1 Florin current.

[For the usances and other particulars relating to Bills of Exchange, see Naples, vol. i.]

NAPLES ON LONDON, see page 25.
NAPLES ON FRANCE, see page 52.
NAPLES ON GENOA, see page 63.
NAPLES ON LEGHORN, see page 70.
NAPLES ON LISBON, see page 75.

NAPLES ON PALERMO.

Reduce 277 Oncie 26 Tari into money of Naples; exchange at 120¾ Ducats per 100 Sicilian Scudi.

Tari		Ducats		Oncie	Tari		Ducats	Gr.
As 1200	:	120¾	::	277	26	:	838	81

30

8336

120¾

12,00)10065,72

838,81

By the Chain Rule.

277 Oncie 26 Tari.
1 Oncia = 30 Tari.
12 Tari = 1 Scudo.
100 Scudi = 120¾ Ducats.

Result as above.

LONDON ON NAPLES, see page 25.
FRANCE ON NAPLES, see page 52.
GENOA ON NAPLES, see page 63.
LEGHORN ON NAPLES, see page 70.
LISBON ON NAPLES, see page 75.

PALERMO ON NAPLES.

Reduce 838 Ducats 81 Grains into Sicilian money; exchange at 120¾ Ducats per 100 Scudi of 12 Tari.

Ducats		Tari		Ducats	Gr.		Oncie	Tari
As 120¾	:	1200	::	838	81	:	277	26

100

12075

838,81

1200

3,0)

12075)100657200(833,6

96600

40572 &c.

277 On. 26 Tari.

By the Chain Rule.

838 Ducati 81 Grani.
120¾ Ducati = 100 Scudi.
1 Scudo = 12 Tari.
30 Tari = 1 Oncia.

Result as above.

NAPLES ON SPAIN.

Reduce 3368 Dollars 6 Reals 16 Maravedis of plate into money of Naples; exchange at 312 Maravedis of plate per Ducato di regno.

Marav.		Ducat		Dollars	Reals	Mar.		Ducats	Grains
As 312	:	1	::	3368	6	16	:	2936	91

8

26950

34

Ducats

312)916316(2936,91

624

2923 &c.

SPAIN ON NAPLES.

Reduce 2936 Ducats 91 Grains into Spanish money; exchange at 312 Maravedis of plate per Ducato di regno.

Ducat		Mar.		Ducats		Dollars	Reals	Mar.
As 1	:	312	::	2936,91	:	3368	6	16

312

8

34)916315,92(26950 16

68

236 &c.

3368 Dol. 6 R. 16 M.

PALERMO.

MONIES OF EXCHANGE.

Exchanges are computed here in Oncie, Tari, and Grani; and also in Scudi, Tari, and Grani.

20 Grani or Grains = 1 Tari or Tarin. 30 Tari = 1 Oncia.

12 Tari = 1 Scudo or Sicilian Crown. 5 Scudi = 2 Oncie.

COURSE OF EXCHANGE, From the Palermo Quotation. *January*, 1820.		EXPLANATION.	
Amsterdam ..	5½	.. Palermo gives 5½ Tari	for 1 Florin.
France	47½	.. ——— gives 47½ Grani	for 1 Franc.
Genoa	39½	.. ——— gives 39½ Grani	for 1 Lira fuori banco.
Hamburgh.....	4 6	.. ——— gives 4 Tari 6 Grani	for 1 Mark banco.
Leghorn.....	12½	.. ——— gives 12½ Tari.....	for 1 Pezza.
Lisbon.....	6¼	.. ——— gives 6¼ Tari	for 1 old Crusado.
London	60	.. ——— gives 60 Tari	for 1 £ sterling.
Naples	121	.. ——— receives 121 Ducati	for 100 Sicilian Crowns.
Rome	12½	.. ——— gives 12½ Tari.....	for 1 Roman Scudo.
Spain	8¾	.. ——— gives 8¾ Tari	for 1 Peso of Plate.
Trieste	5 27	.. ——— gives 5 Tari 27 Grani	for 1 Florin current.

[For the usances and other particulars relating to Bills of Exchange, see Sicily, vol. i.]

PALERMO ON LONDON, see page 25.
PALERMO ON GENOA, see page 63.
PALERMO ON LEGHORN, see page 71.
PALERMO ON LISBON, see page 75.
PALERMO ON NAPLES, see page 81.

PALERMO ON AMSTERDAM.

Reduce 2564 Florins 10 Stivers into Sicilian money; exchange at $5\frac{1}{2}$ Tari per Florin.

	Florin		Tari		Florins	Stivers		Oncie	Tari	Gr.
As	1	:	$5\frac{1}{2}$	: :	2564	10	:	470	4	15

20 20

20 51290

$5\frac{1}{2}$

2,0)28209,5

3,0)1410,4 15

470 On. 4 Tari 15 Grani.

LONDON ON PALERMO, see page 25.
GENOA ON PALERMO, see page 63.
LEGHORN ON PALERMO, see page 71.
LISBON ON PALERMO, see page 75.
NAPLES ON PALERMO, see page 81.

AMSTERDAM ON PALERMO.

Reduce 470 Oncie 4 Tari 15 Grani into Dutch money; exchange at $5\frac{1}{2}$ Tari per Florin.

	Tari		Florin		Oncie	Tari	Grani		Florins	Stivers
As	$5\frac{1}{2}$	:	1	: :	470	4	15	:	2564	10

30

14104

20

2,0

5,5)282095(5129,0

2564 Florins 10 Stivers.

PALERMO ON SPAIN.

Reduce 4646 Dollars 5 Reals 14 Maravedis of plate into Sicilian money; exchange at $8\frac{1}{2}$ Tari per Dollar of plate.

	Dol.		Tari		Dol.	Reals	Mar.		Oncie	Tari	Gr.
As	1	:	$8\frac{1}{2}$	: :	4646	5	14	:	1316	16	15

8 8

8 37173

34 34

272 1263896

$8\frac{1}{2}$

3,0

272)10743116(3949,6 15

816

2583 &c.

1316 On. 16 Tari 15 Gr.

SPAIN ON PALERMO.

Reduce 1316 Oncie 16 Tari 15 Grani into Spanish money; exchange at $8\frac{1}{2}$ Tari per Dollar of plate.

	Tari		Dollar		Oncie	Tari	Grani		Dollars	Reals	Mar.
As	$8\frac{1}{2}$	:	1	: :	1316	16	15	:	4646	5	14

20 30

170 39496

20

Dol. Reals Mar.

17,0)78993,5(4646 5 14

68

109 &c.

Remainder × 8 × 34 &c.

PETERSBURG.

MONIES OF EXCHANGE.

Exchanges are computed here in Rubles and Copecks.

10 Copecks = 1 Grieve or Grievener.

10 Grieves, or 100 Copecks = 1 Ruble.

COURSE OF EXCHANGE, From the Petersburg Quotation. *January*, 1820.		EXPLANATION.		
AMSTERDAM	$9\frac{3}{3}\frac{1}{2}$ ..	PETERSBURG receives	$9\frac{3}{3}\frac{1}{2}$ Stivers	for 1 Ruble.
CONSTANTINOPLE..	73 ..	——— gives	73 Copecks	for 1 Piastre.
FRANCE	104 ..	——— receives	104 Centimes	for 1 Ruble.
HAMBURGH	$8\frac{3}{3}\frac{1}{2}$ ..	——— receives	$8\frac{3}{3}\frac{1}{2}$ Schillings Lubs banco..	for 1 Ruble.
LEIPSIC	17 ..	——— receives	17 Groschen	for 1 Ruble.
LONDON	$10\frac{1}{3}\frac{1}{2}$ ..	——— receives	$10\frac{1}{3}\frac{1}{2}$ Pence sterling	for 1 Ruble.
VIENNA	125 ..	——— receives	125 Creutzers.....	for 1 Ruble.

[For the days of grace and other particulars relating to Bills of Exchange, see RUSSIA, vol. i.]

PETERSBURG ON AMSTERDAM.

Reduce 2655 Florins 13 Stivers $2\frac{1}{2}$ Pennings into Russian money; exchange at $9\frac{5}{8}$ Stivers per Ruble.

	Stivers		Ruble		Florins	Stivers	Pen.		Rubles	Copecks
As	$9\frac{5}{8}$	:	1	::	2655	13	2,5	:	5518	25
	16				20					
	154				53103					
					16					
								Rubles	Copecks	
					154)8498105(			5518	25	
					770					
					798 &c.					

AMSTERDAM ON PETERSBURG.

Reduce 5518 Rubles 25 Copecks into Dutch money; exchange at $9\frac{5}{8}$ Stivers per Ruble.

	Ruble		Stivers		Rubles	Copecks		Florins	Sti.	Pen.
As	1	:	$9\frac{5}{8}$	::	5518	25	:	2655	13	$2\frac{1}{2}$
					9,625					
					2,0)5311,315625					
					2655,6578125					
					20					
					13,1562500					
					16					
					2,5000000					

PETERSBURG ON FRANCE.

Reduce 7077 Francs 67 Centimes into Russian money; exchange at 1 Franc 10 Centimes per Ruble.

	Franc	Cen.		Ruble			Francs	Cen.		Rubles	Cop.
As	1	10	:	1	:	:	7077	67	:	6434	25
							11,0)70776,7				
							6434,25				

FRANCE ON PETERSBURG.

Reduce 6434 Rubles 25 Copecks into French money; exchange at 1 Franc 10 Centimes per Ruble.

	Ruble		Franc	Cen.		Rubles	Copecks		Francs	Centimes
As	1	:	1	10	: :	6434	25	:	7077	67
						1,10				
						7077,6750				

PETERSBURG ON LONDON.

Reduce £131 1s. 1d. sterling into Russian money; exchange at $9\frac{1}{8}$d. per Ruble.

	d.		Ruble			£	s.	d.		Rubles	Copecks
As	$9\frac{1}{8}$	:	1	:	:	131	1	1	:	3466	90
						20					
						2621					
						12					
									Rubles		
						9,125)31453(			3446,90		

LONDON ON PETERSBURG.

Reduce 3446 Rubles 90 Copecks into sterling; exchange at $9\frac{1}{8}$d. per Ruble.

	Ruble		d.		Rubles	Copecks		£	s.	d.
As	1	:	$9\frac{1}{8}$	::	3446	90	:	131	1	1
					3446,90					
					9,125					
					240)31452,96250(			131,05401		
					240			20		
					745 &c.			1,08020		
								12		
								0,96240		

ROME.

MONIES OF EXCHANGE.

Exchanges are computed in Scudi moneta, and Bajocchi; or in Scudi di stampa, Soldi, and Denari d'oro. Quattrini and Mezzi Quattrini are also sometimes reckoned.

2 Mezzi Quattrini = 1 Quattrino.

5 Quattrini = 1 Bajocco.

10 Bajocchi = 1 Paolo; 10 Paoli, or 100 Bajocchi = 1 Scudo moneta, or Roman Crown.

1523 Mezzi Quattrini, or 152 $\frac{3}{10}$ Bajocchi = 1 Scudo di stampa d'oro, or gold Crown.

12 Denari d'oro = 1 Soldo d'oro; 20 Soldi d'oro = 1 Scudo di stampa d'oro.

COURSE OF EXCHANGE, From the Roman Quotation. *January*, 1820.		EXPLANATION.	
Amsterdam	44	.. Rome gives 44 Bajocchi	for 1 Florin.
Ancona	98	.. ——— gives 98 Scudi Romani	for 100 Scudi of Ancona.
Bologna	102	.. ——— gives 102 Scudi Romani.....	for 100 Scudi of Bologna.
Florence	104¼	.. ——— gives 104¼ Scudi di stampa d'oro	for 100 Scudi d'oro.
France	105	.. ——— receives 105 Sous in Francs	for 1 Scudo.
Genoa.....	128	.. ——— receives 128 Soldi fuori banco	for 1 Scudo.
Leghorn	96	.. ——— gives 96 Bajocchi	for 1 Pezza of 8 Reals.
London	47	.. ——— receives 47 Pence sterling.....	for 1 Scudo.
Milan.....	139¾	.. ——— gives 139¾ Scudi Romani	for 100 Scudi imperiali.
Naples	127½	.. ——— receives 127½ Ducati di regno	for 100 Scudi Romani.
Venice	557	.. ——— receives 557 Centimes.....	for 1 Scudo.

[For the usances and other particulars relating to Bills of Exchange, see Rome, vol. i.]

ROME ON FRANCE.

Reduce 26813 Francs 54 Centimes into Roman money; exchange at 5 Francs 20 Centimes per Scudo moneta.

	Francs	Cen.		Scudo			Francs	Cen.		Scudi	Baj.
As	5	20	:	1	: :		26813	54	:	5156	45

52,0(268135,4(5156,45
260

81 &c.

FRANCE ON ROME.

Reduce 5156 Scudi 45 Bajocchi into French money; exchange at 5 Francs 20 Centimes per Scudo moneta. The operation is best performed decimally; thus,

	Scudo		Francs			Scudi		Francs
As	1	:	5,20	: :		5156,45	:	26813,54

5,20

26813,5400

ROME ON GENOA.

Reduce 4017 Lire 3 Soldi 9 Denari fuori banco into Roman money; exchange at 125 Soldi fuori banco per Scudo moneta.

	Soldi		Scudo			Lire	Sol.	Den.		Scudi	Baj.
As	125	:	1	: :		4017	3	9	:	642	75
	12					× 20	× 12				
	1500		15,00)9641,25								

642,75

GENOA ON ROME.

Reduce 642 Scudi 75 Bajocchi into money of Genoa; exchange at 125 Soldi fuori banco per Scudo moneta.

	Scudo		Soldi			Scudi	Baj.		Lire	Sol.	Den.
As	1	:	125	: :		642	75	:	4017	3	9

642,75
125

2,0)8034,375

4017 Lire 3¾ Soldi.

ROME ON LONDON.

Reduce £937 11s. 5d. sterling into Roman money; exchange at 52d. sterling per Scudo.

	d.		Scudo			£	s.	d.		Scudi	Baj.
As	52	:	1	: :		937	11	5	:	4327	25
						20					
						18751					
						12					
						52)225017(4327				Scudi	Baj.
						208					
						170 &c.					

ROME ON MILAN, see page 79.

LONDON ON ROME.

Reduce 4327 Scudi 25 Bajocchi into sterling; exchange at 52d. sterling per Scudo.

	Scudo		d.			Scudi	Bajoc.		£	s.	d.
As	1	:	52	: :		4327	25	:	937	11	5

4327,25
52

12)225017,00

2,0)1875,1 5

£937 11s. 5d.

MILAN ON ROME, see page 79.

SPAIN.

MONIES OF EXCHANGE.

Exchanges are generally computed here in denominations of Plate, which is always understood to be Old Plate, if New Plate be not mentioned.

There are three principal denominations of these imaginary monies in which exchanges are generally transacted; viz. Dollars, Doubloons, and Ducats, and they are divided into Reals and Maravedis of Plate, and sometimes converted into Vellon and other denominations.

The Dollar of Exchange, also called *Peso* or *Piastre de Cambio* or *de Plata,* is divided into 8 Reals of 34 Maravedis of Plate each, and sometimes into 16 Quartos.

The *Doubloon de Plata,* or Pistole of Exchange, is four times the Dollar, and therefore contains 32 Reals or 1088 Maravedis of Plate.

The Ducat of Plate, also called *Ducado de Cambio,* contains 11 Reals 1 Maravedi, or 375 Maravedis of Plate.

At Alicant, Valencia, and Barcelona, exchanges are transacted in Libras of 20 Sueldos, or 240 Dineros.

The Libra of Alicant and Valencia is the Dollar of Plate. This is sometimes divided into 10 Reals of New Plate, which are, of course, equal to 8 Reals of Old Plate.

The Libra of Barcelona, commonly called *Libra Catalan,* is worth $5\frac{5}{7}$ Reals of Plate; hence 7 of those Libras equal 5 Dollars of Plate; and, therefore, 28 Sueldos Catalan equal 1 Dollar.

The Hard Dollar of 20 Reals Vellon is occasionally used in exchanges, and is also divided into 12 Reals, each Real of 16 Quartos. The Current Dollar, which is an imaginary money, valued at two-thirds of the Hard Dollar, is divided into 8 Reals, and the Real into 16 Quartos. The two latter are the principal monies of exchange used at Gibraltar.

COURSE OF EXCHANGE, From the Cadiz Quotation. *February,* 1820.		EXPLANATION.	
Amsterdam....	96	.. Cadiz receives 96 Grotes Flemish	for 1 Ducat of plate.
France.....	14	.. ——— receives 14 Francs.....	for 1 Doubloon of plate.
Genoa	125	.. ——— gives 125 Dollars of plate	for 100 Pezze of $5\frac{3}{4}$ Lire.
Hamburgh	88	.. ——— receives 88 Grotes Flemish banco ..	for 1 Ducat of exchange.
Leghorn	123	.. ——— gives 123 Dollars of plate	for 100 Pezze of 8 Reals.
Lisbon	2700	.. ——— receives 2700 Rees	for 1 Doubloon of plate.
London	$35\frac{3}{8}$	.. ——— receives $35\frac{3}{8}$ Pence sterling.....	for 1 Dollar of plate.
Naples.....	290	.. ——— gives 290 Maravedis of plate	for 1 Ducato di regno.

[For the usances and other particulars relating to Exchange, see Spain, also Alicant, Barcelona, Bilboa, Cadiz, Castille, and Gibraltar, vol. i.]

SPAIN ON AMSTERDAM, see page 31.
SPAIN ON FRANCE, see page 53.
SPAIN ON GENEVA, see page 60.
SPAIN ON GENOA, see page 64.
SPAIN ON HAMBURGH, see page 67.
SPAIN ON LEGHORN, see page 71.
SPAIN ON LISBON, see page 75.
SPAIN ON LONDON, see page 26.
SPAIN ON NAPLES, see page 81.
SPAIN ON PALERMO, see page 83.

AMSTERDAM ON SPAIN, see page 31.
FRANCE ON SPAIN, see page 53.
GENEVA ON SPAIN, see page 60.
GENOA ON SPAIN, see page 64.
HAMBURGH ON SPAIN, see page 67.
LEGHORN ON SPAIN, see page 71.
LISBON ON SPAIN, see page 75.
LONDON ON SPAIN, see page 26.
NAPLES ON SPAIN, see page 81.
PALERMO ON SPAIN, see page 83.

The above are the principal places with which Spain exchanges, and, therefore, any further examples would be unnecessary if Bills were always drawn in Plate, the money in which the Courses of Exchange are quoted. But as they are sometimes drawn in other denominations, such as Reals Vellon, and Libras of Alicant, Valencia, and Barcelona, it remains to show how these several currencies are converted into Plate.

It has been stated, p. 26, that Plate is reduced into Vellon by multiplying by 32 and dividing by 17, and *vice versâ*; but when Bills are drawn in Hard Dollars, Reals, and Maravedis Vellon, which is sometimes done in Bilboa and the adjacent places, the operation becomes more complex, as in the following example.

BILBOA ON LONDON.

Reduce £800 4s. 8d. into Hard Dollars, Reals, and Maravedis; exchange at 52½d. per Hard Dollar.

34 Maravedis = 1 Real, 20 Reals = 1 Hard Dollar.

	d.	Hard Dol.			£	s.	d.		Dollars	Reals	Mar.
As	52½	: 1	:	:	800	4	7¼	:	2754	8	11
	4	8			× 20	× 12	× 4				
	210	8			768224						
		34			8704						
		272			6686621696						
		32			210						
		8704			31841055						
					17						
					1873003						
					34						
					5508,8	11					
					2,0						

2754 H. Dol. 8 Reals 11 Mar.

LONDON ON BILBOA.

Reduce 2754 Hard Dollars 8 Reals 11 Maravedis Vellon into sterling; exchange at 52½d. per Hard Dollar.

	H. Dol.		d.		H. Dollars	Reals	Mar.		£	s.	d.
As	1	:	52½	: :	2754	8	11	:	800	4	7¾
	8				20						
	8				55088						
	34				34						
	272				1873003						
	32				17						
	8704				31841051						
					52½						
					12						
					1671655177½						
					8704						
					80125 &c.						
					192055¾						
					2,0						
					1600,4	7					

£800 4s. 7¾d.

EFFECTIVE MONEY REDUCED TO PAPER.

Bills, when they are not made payable in *effective*, are paid in a paper money, called *Vales Reales*, which bears a considerable discount.

Effective money is therefore reduced to paper by saying: as 100 *minus* the discount is to 100, so is the effective sum to the sum in paper.

Reduce 743 Reals 10 Maravedis effective to paper money; discount at 48 per cent.

			Reals	Mar.		Reals	Mar.
As 52	:	100	::	743	10	:	1429	14
				34				

34)
52)2527200(48600(1429 14
208 34
447 &c. 146

PAPER MONEY REDUCED TO EFFECTIVE.

Paper money is reduced to effective by reversing the foregoing operation: that is, as 100 is to 100 less the discount, so is the sum in paper to the effective sum.

Reduce 1429 Reals 14 Maravedis in paper into effective; discount at 48 per cent.

			Reals	Mar.		Reals	Mar.
As 100	:	52	::	1429	14	:	743	10
				34				

48600
52
Reals Mar.
34)25272,00(743 10
238
147 &c.

LIBRAS OF ALICANT REDUCED TO REALS OF PLATE.

The Libras of Alicant and Valencia being Dollars of plate, are reduced to Reals by multiplying by 8. The Sueldos should be multiplied by 8 and divided by 20, because 20 Sueldos equal 8 Reals.

Reduce 314 Libras 11 Sueldos 3 Dineros of Alicant into Reals of plate.

Libras	Suel.	Din.
314	11	3
8	8	
2512 Reals.	2,0)9,1	
4 Reals 17 Mar.		
	4½ Reals.	

Ans. 2516 Reals 17 Mar.

REALS OF PLATE REDUCED TO LIBRAS OF ALICANT.

Reals of plate are reduced to Libras of Alicant and Valencia by dividing them by 8. The remainder, if there is any, should be multiplied by 20, and divided by 8, in order to reduce it to Sueldos.

Reduce 2516 Reals 17 Maravedis into Libras of Alicant.

Reals.
8)2516½

314 Libras 4½ Reals.
20
Sueld. Din.
8)90(11 3

Ans. 314 Libras 11 Sueldos 3 Dineros.

LIBRAS OF BARCELONA REDUCED TO REALS OF PLATE.

The Libras Catalan are reduced to Reals of plate by saying: as 7 Libras is to 40 Reals, so is the given number of Libras to the number of Reals sought.

Reduce 463 Libras 6 Sueldos 3 Dineros Catalan into Reals of plate.

Libras	Reals		Libras	Sucl.	Din.		Reals	Mar.
As 7	: 40	::	463	6	3	:	2647	17
			40					
			18520					
5 Sueldos = ¼			10					
1 Sueldo = ⅕			2					
3 Dineros = ¼			½					
			7)18532½					

Ans. 2647½ Reals of plate.

REALS OF PLATE REDUCED TO LIBRAS OF BARCELONA.

Reals of plate are reduced to Libras Catalan by reversing the foregoing operation: that is, as 40 Reals is to 7 Libras, so is the given number of Reals to the number of Libras sought.

Reduce 2647 Reals 17 Maravedis of plate to Libras Catalan.

Reals	Lib.		Reals	Mar.		Libras	Sucl.	Din.
As 40	: 7	: :	2647	17	:	463	6	3
			7					
			18529					
17 Maravedis = ½ ..			3,5					
			4,0)1853,25					
			463,3125 =			463	6	3

STOCKHOLM.

MONIES OF EXCHANGE.

Exchanges are computed in Rixdollars specie, Skillings, and Fenings.

12 Fenings or Oers = 1 Skilling.

48 Skillings = 1 Rixdollar specie.

COURSE OF EXCHANGE, From the Stockholm Quotation. *January*, 1820.		EXPLANATION.		
AMSTERDAM....	128	STOCKHOLM	gives 128 Skillings.....	for 1 Rixdollar.
COPENHAGEN ..	86	———	gives 86 Skillings	for 1 Rixdollar.
DANTZIC	24	———	gives 24 Skillings	for 1 Florin.
FRANCE	25	———	gives 25 Skillings	for 1 Franc.
HAMBURGH	135	———	gives 135 Skillings.....	for 1 Rixdollar banco.
LEGHORN	114	———	gives 114 Skillings.....	for 1 Pezza.
LISBON	51	———	gives 51 Skillings	for 1 old Crusado.
LONDON	12 10	———	gives 12 Rixdollars 10 Skillings ..	for 1 £ sterling.
PETERSBURG ..	25¼	———	gives 25¼ Skillings.....	for 1 Ruble.
SPAIN	110	———	gives 110 Skillings.....	for 1 Ducat of plate.

[For the usances and other particulars relating to Bills of Exchange, see SWEDEN, vol. i.]

STOCKHOLM ON AMSTERDAM.

Reduce 10845 Florins 12 Stivers 8 Pennings into Swedish money; exchange at 44 Swedish Skillings per Rixdollar of $2\frac{1}{2}$ Florins.

	Florins		Skillings		Florins	Stivers	Pen.		Rixdollars	Sk.
As	$2\frac{1}{2}$	:	44	: :	10845	12	8	:	3976	35
	20				20					
	50				216912					
	16				16					
	800				3470600					
					44					
					8,00)1527064,00					

Rixds. Skill.
48)190883(3976 35

AMSTERDAM ON STOCKHOLM.

Reduce 3976 Rixdollars 35 Skillings Swedish into Dutch banco; exchange at 44 Skillings per Rixdollar banco.

	Skil.		Rixd.	Fl.		Rxds.	Sk.		Florins	Sti.	Pen.
As	44	:	1	or $2\frac{1}{2}$	: :	3976	35	:	10845	12	8
						48					
						190883					
						$2\frac{1}{2}$					

Florins Sti. Pen.
44)477207$\frac{1}{2}$(10845 12 8
44
37 &c.

STOCKHOLM ON HAMBURGH.

Reduce 1544 Marks banco into Swedish money; exchange at $46\frac{1}{2}$ Skillings Swedish per Rixdollar banco.

	Marks		Skillings		Marks		Rixd.	Skillings
As	3	:	$46\frac{1}{2}$	: :	1544	:	498	28
					$46\frac{1}{2}$			
					3)71796			

Rixd. Skil.
48)23932(498 28
192
473 &c.

HAMBURGH ON STOCKHOLM.

Reduce 498 Rixdollars 28 Skillings Swedish into Hamburgh money; exchange at $46\frac{1}{2}$ Skillings per Rixdollar of 3 Marks banco.

	Skil.		Marks		Rixd.	Skil.		Marks
As	$46\frac{1}{2}$	:	3	: :	498	28	:	1544
	2				48			
	93				23932			
					3			
					71796			
					2			

Marks.
93)143592(1544
93 &c.

STOCKHOLM ON LONDON.

Reduce £2009 3s. 4d. sterling into Swedish money; exchange at 4 Rixdollars 30 Skillings per £ sterling.

	£		Rixds.	Sk.		£	s.	d.		Rixds.	Sk.
As	1	:	4	30	: :	2009	3	4	:	9292	19
			48			20					
			222			40183					
						12					
						482200					
						222					
						48)					
						24,0)1070484 0,0(446035					
						96 &c.					

9292 Rixd. 19 Sk.

LONDON ON STOCKHOLM.

Reduce 9292 Rixdollars 19 Skillings Swedish into sterling; exchange at 4 Rixdollars 30 Skillings per £ sterling.

	Rixds.	Sk.		£		Rixds.	Sk.		£	s.	d.
As	4	30	:	1	: :	9292	19	:	2009	3	4
	48					48					
	222					446035					
						444					
						20 &c.					

£ s. d.
222)446035(2009 3 4
444
20 &c.

TURIN.

MONIES OF EXCHANGE.

Exchanges are computed here in Lire, Soldi, and Denari.

12 Denari = 1 Soldo.
20 Soldi = 1 Lira.

COURSE OF EXCHANGE, From the Turin Quotation. *January*, 1820.			EXPLANATION.
AMSTERDAM..	35		.. TURIN gives 35 Soldi . . . . . for 1 Florin.
AUGSBURG ..	43¼		.. ——— gives 43¼ Ditto . . . . . for 1 Florin current.
FRANCE.....	20	1	.. ——— gives 20 Lire 1 Soldo . . . . . for 24 Francs.
GENEVA	82		.. ——— gives 82 Soldi . . . . . for 3 Livres current.
GENOA	9	10	.. ——— gives 9 Lire 10 Soldi . . . . . for 13 Lire 10 Soldi f. b.
HAMBURGH ..	31½		.. ——— gives 31½ Soldi . . . . . for 1 Mark banco.
LEGHORN	87½		.. ——— gives 87½ Ditto . . . . . for 1 Pezza of 8 Reals.
LONDON.....	21	5	.. ——— gives 21 Lire 5 Soldi . . . . . for £1 sterling.
MILAN	97½		.. ——— gives 97½ Soldi . . . . . for 1 Filippo or 7½ Lire correnti.
NAPLES.....	74		.. ——— gives 74 Ditto . . . . . for 1 Ducat.
ROME	87		.. ——— gives 87 Ditto . . . . . for 1 Scudo Romano.
SPAIN	63		.. ——— gives 63 Ditto . . . . . for 1 Dollar of exchange.
VENICE.....	94		.. ——— gives 94 Ditto . . . . . for 1 Ducat current.
VIENNA	43¼		.. ——— gives 43¼ Ditto . . . . . for 1 Florin current.

[For the usances and other particulars relating to Bills of Exchange, see TURIN, vol. i.]

TURIN ON FRANCE.

Reduce 1728 Francs 60 Centimes into money of Turin; exchange at 20 Lire 10 Soldi for 24 Francs.

	Francs		Lire		Francs		Lire	Soldi	Den.
As	24	:	$20\frac{1}{2}$	: :	1728,60	:	1476	10	3

$20\frac{1}{2}$

3457200
864,30

Lire Sol. Den.
24)35436,30(1476 10 3
24
114 &c.

FRANCE ON TURIN.

Reduce 1476 Lire 10 Soldi 3 Denari of Turin into French money; exchange at 20 Lire 10 Soldi for 24 Francs.

	Lire	Soldi		Francs			Lire	Sol.	Den.		Francs	Cen.
As	20	10	:	24	: :		1476	10	3	:	1728	60
	20						20					
	410						29530					
	12						12					
	4920						354363					
							24					

Francs
492,0)850471,2(1728,60
492 &c.

TURIN ON GENOA.

Reduce 14239 Lire 16 Soldi fuori banco into money of Turin; exchange at 9 Lire 5 Soldi of Turin per Sequin of $13\frac{1}{2}$ Lire fuori banco.

	Lire	Soldi		Lire	Soldi			Lire	Soldi		Lire	Sol.
As	13	10	:	9	5	: :		14239	16	:	9756	18
	20			20				20				
	270			185				284796				
								185				
								2,0				

27,0)5268726,0(19513,8
27
9756 Lire 18 Sol.
256 &c.

GENOA ON TURIN.

Reduce 9756 Lire 18 Soldi of Turin into money of Genoa; exchange at 9 Lire 5 Soldi per Sequin of $13\frac{1}{2}$ Lire fuori banco.

	Lire	Soldi		Lire	Soldi			Lire	Soldi		Lire	Sol.
As	9	5	:	13	10	: :		9756	18	:	14239	16
	20			20				20				
	185			270				195138				
								270				
								2,0				

185)52687260(28479,6
370
14239 Lire 16 Sol.
1568 &c.

TURIN ON LONDON.

Reduce £406 16s. 2d. sterling into money of Turin; exchange at 19 Lire 10 Soldi per £ sterling.

	£		Lire	Soldi		£	s.	d.		Lire	Soldi	Den.
As	1	:	19	10	: :	406	16	2	:	7932	15	3
	20		20			20						
	20		390			8136						
	12					12						
	240					97634						
						390						
						2,0						

24,0)3807726,0(15865,5
24
7932 Lire 15 Sol. 3 Den.
140 &c.

LONDON ON TURIN.

Reduce 7932 Lire 15 Soldi 3 Denari into sterling; exchange at 19 Lire 10 Soldi per £ sterling.

	Lire	Soldi		£			Lire	Sol.	Den.		£	s.	d.
As	19	10	:	1	: :		7932	15	3	:	406	16	2
	20						20						
	390						158655						
	12						12						
	4680						1903863						

£ s. d.
468,0)1903863(406 16 2
1872
3186 &c.

VENICE.

MONIES OF EXCHANGE.

Exchanges have been computed here in Lire, Soldi, and Denari, Moneta piccola, and also in Ducats; but they are now generally computed in Centimes, of Italian Livres, which are similar to those of France.

12 Denari = 1 Soldo. 20 Soldi = 1 Lira. 6 Lire 4 Soldi piccoli = 1 Ducat current, or of account.

8 Lire piccoli = 1 Ducat effective.

100 Centimes = 1 Lira Italiana.

40,000 Lire piccoli = 30,467 Lire Italiane.

COURSE OF EXCHANGE, From the Venetian Quotation. *January*, 1820.		EXPLANATION.	
Amsterdam.....	224	. . Venice gives 224 Centimes	for 1 Florin.
Ancona.....	540	. . ——— gives 540 Centimes	for 1 Scudo.
Augsburg.....	260	. . ——— gives 260 Centimes.....	for 1 Florin current.
Constantinople ..	83	. . ——— gives 83 Centimes	for 1 Piastre.
France.....	105	. . ——— gives 105 Centimes	for 1 Franc.
Genoa	86	. . ——— gives 86 Centimes	for 1 Lira fuori banco.
Hamburgh	196	. . ——— gives 196 Centimes.....	for 1 Mark banco.
Leghorn	533	. . ——— gives 533 Centimes	for 1 Pezza.
Lisbon	66	. . ——— receives 66 Rees.....	for 1 Lira.
London	26,30	. . ——— gives 26,30 Centimes.....	for 1 £ sterling.
Milan	102	. . ——— gives 102 Centimes	for 100 Centimes.
Naples	433	. . ——— gives 433 Centimes	for 1 Ducato di regno.
Palermo	13	. . ——— gives 13 Lire	for 1 Oncia.
Rome.....	550	. . ——— gives 550 Centimes.....	for 1 Scudo Romano.
Vienna.....	261	. . ——— gives 261 Centimes	for 1 Florin effective.

[For the usances and other particulars relating to Bills of Exchange, see Venice, vol. i.]

VENICE ON LONDON, see page 26.

VENICE ON CONSTANTINOPLE, see page 43.

VENICE ON GENOA, see page 64.

VENICE ON HAMBURGH, see page 68.

VENICE ON LISBON, see page 75.

LONDON ON VENICE, see page 26.

CONSTANTINOPLE ON VENICE, see page 43.

GENOA ON VENICE, see page 64.

HAMBURGH ON VENICE, see page 68.

LISBON ON VENICE, see page 75.

VENICE ON FRANCE.

Reduce 3372 Francs 30 Centimes into Venetian money; exchange at 2 Lire 5 Soldi piccoli per Franc.

Franc		Lire	Soldi		Francs	Cent.		Lire	Soldi	Den.
As 1	:	2	5	::	3372	30	:	7587	13	6
		20				45				
		45		2,0)15175,35,0						
					7587	13	5			
							12			
							6,0			

By Practice.

	Francs	Cents.
	3372	30
	2 Lire 5 Soldi.	
	6744	
5 Soldi = ¼ ..	843	
20 Centimes = ⅕ ..	0	9
10 Centimes = ½ ..	0	4 6
Ans.	7587	13 6

FRANCE ON VENICE.

Reduce 7587 Lire 13 Soldi 6 Denari piccoli into French money; exchange at 2 Lire 5 Soldi piccoli per Franc.

Lire	Soldi	Franc		Lire	Soldi	Den.		Francs	Cent.
As 2	5	: 1	: :	7587	13	6	:	3372	30
20				20					
45				151753					
12				12					
540			54,0)182104,2(3372,30						
			162						
			201 &c.						

By Decimals.

2 Lire 5 Soldi	=	2,25
7587 Lire 13 Soldi 6 Den.	=	7587,675

As 2,25 : 1 : : 7587,675 : 3372,30

The above is the mode of exchange formerly used, but as it is in a great measure discontinued, any further examples are deemed unnecessary.

VIENNA.

MONIES OF EXCHANGE.

Exchanges are computed in Florins and Creutzers, or in Rixdollars and Creutzers.

4 Pfenings = 1 Creutzer.

60 Creutzers = 1 Florin or Gulden.

1½ Florin, or 90 Creutzers = 1 Rixdollar of account.

2 Florins, or 120 Creutzers = 1 Rixdollar specie.

COURSE OF EXCHANGE, From the Vienna Quotation. *January*, 1820.		EXPLANATION.		
AMSTERDAM	140	.. VIENNA gives 140 Rixdollars current		for 100 Rixdollars.
AUGSBURG	100	.. ——— gives 100 Rixdollars current		for 100 Rixds. current.
CONSTANTINOPLE..	112	.. ——— gives 112 Florins		for 100 Piastres.
FRANCE	119	.. ——— receives 119 Florins		for 100 Ecus of 3 Francs.
GENOA	30½	.. ——— receives 30½ Soldi fuori banco ..		for 1 Florin current.
HAMBURGH	148½	.. ——— gives 148½ Rixdollars current....		for 100 Rixds. banco.
LEGHORN	57½	.. ——— receives 57½ Soldi moneta buona..		for 1 Florin.
LONDON	9 52	.. ——— gives 9 Florins 52 Creutzers		for 1 £ sterling.
MILAN	67¼	.. ——— receives 67¼ Soldi correnti		for 1 Florin current.
PRAGUE	99½	.. ——— gives 99½ Florins		for 100 Florins current.
SMYRNA	112	.. ——— gives 112 Florins		for 100 Piastres.
VENICE	184	.. ——— gives 184 Florins		for 500 Lire piccole.

[For the usances and other particulars relating to Bills of Exchange, see VIENNA, vol. i.]

VIENNA ON CONSTANTINOPLE, see page 43.

VIENNA ON FRANCE, see page 53.

VIENNA ON HAMBURGH, see page 68.

VIENNA ON LONDON, see page 27.

CONSTANTINOPLE ON VIENNA, see page 43.

FRANCE ON VIENNA, see page 53.

HAMBURGH ON VIENNA, see page 68.

LONDON ON VIENNA, see page 27.

VIENNA ON LEGHORN.

Reduce 2233 Pezze into Austrian money; exchange at 42 Soldi di Lira moneta buona per Austrian Florin.

[5¾ Lire moneta buona = 1 Pezza of 8 Reals.]

				Pezze		Lire	Soldi di Lira
As 4	:	23	: :	2233	:	12839	15
				23			
				4)51359			
				12839 Lire 15 Soldi.			

	Soldi		Florin		Lire	Soldi		Florins	Creutz.
Then, as	42	:	1	: :	12839	15	:	6114	10
					20				
					42)256795(6114	Fl.	Cr.	10	
					252				
					47 &c.				

Remainder × 60 &c.

By the Chain Rule.

		2233 Pezze.
1 Pezza	=	115 Soldi di Lira.
42 Soldi	=	1 Florin.

Result as above.

LEGHORN ON VIENNA.

Reduce 6114 Florins 10 Creutzers of Austria into money of Leghorn; exchange at 42 Soldi di Lira moneta buona per Florin.

	Florin		Soldi		Florins	Creutzers		Lire	Soldi
As	1	:	42	: :	6114	10	:	12839	15
					60				
					366850				
					42				
					6,0)1540770,0				
					2,0)25679,5				
					12839 Lire 15 Soldi.				

	Lire		Soldi di Lira		Pezze				
Then, as	23	:	4	: :	12839	15	:	2233	
					20				
					256795				
					4				
					20)				
					23)1027180(44660				
					92			2233	
					107 &c.				

By the Chain Rule.

		6114 Florins 10 Creutzers.
1 Florin	=	42 Soldi di Lira.
115 Soldi di Lira	=	1 Pezza.

Result as above.

UNITED STATES OF AMERICA.

MONIES OF EXCHANGE.

Exchanges are computed in Dollars, Dimes, and Cents; and in some places in Pounds, Shillings, and Pence currency.

10 Cents = 1 Dime; 10 Dimes, or 100 Cents = 1 Dollar.
The Dollar is also divided into 1000 parts, called Mills.
The par of the Dollar is reckoned at 4s. 6d. sterling.
12 Pence currency = 1 Shilling; 20 Shillings = 1 Pound.

[For the different currencies and values of the Dollar, see UNITED STATES, vol. i. and *Table of Coins*, vol. ii.]

COURSES OF EXCHANGE, FROM DIFFERENT QUOTATIONS.

New York, *January*, 1820.

AMSTERDAM	42 Cents per Florin or Gilder.
BREMEN	78 Cents per Rixdollar.
HAMBURGH	35 Cents per Mark banco.
LONDON, direct	£177½ currency for £100 sterling.
PARIS	5 Francs 40 Centimes per Dollar.

Philadelphia.

AMSTERDAM	40 Cents per Florin or Gilder.
HAMBURGH	35 Cents per Mark banco.
LONDON, 2 per cent. Premium	4s. 6d. sterling per Dollar.

Baltimore.

AMSTERDAM	40 Cents per Florin or Gilder.
HAMBURGH	33⅓ Cents per Mark banco.
LONDON at 60 days sight	101—that is—100 Cents for 4s. 6d. sterling, with 1 per cent. premium.

[For damages on returned bills, and other particulars relating to American Exchanges, see UNITED STATES, vol. i.]

LONDON ON AMERICA.

American money is reduced to sterling *at par* by saying: as 1 Dollar is to 4s. 6d. sterling, so is the given sum to the sum sought.

Reduce 1783 Dollars 80 Cents to sterling, at par.

Doll.	s.	d.		Doll.	Cents		£	s.	d.
As 1	: 4	6	: :	1783	80	:	401	7	1
12				54					
—				—					
54				7132					
				8915					
80 Cents = $\frac{4}{5}$ . .				43					
				—					
				12)96325					
				—					
				2,0)802,7	1				
				£401	7s.	1d.			

Decimally.

1783,80
4,5
—
891900
713520
—
2,0)802,7,100
12
—
401,7,1,2

If the exchange be not at par, the difference is to be computed before the Dollars are reduced to sterling.

Reduce 4282 Dollars 50 Cents to sterling; exchange at 2 per cent. above par.

				Dollars	Cents		Dollars	Cents
As 100	: 102		: :	4282	50	:	4368	15
Dollar	s.	d.		Dollars	Cents		£	s.	d.
And as 1	: 4	6	: :	4368	15	:	982	16	8

Reduce 3646 Dollars 50 Cents to sterling; exchange at 2 per cent. under par.

				Dollars	Cents		Dollars
As 102	: 100		: :	3646	50	:	3575
Dollar	s.	d.		Dollars		£	s.	d.
And as 1	: 4	6	: :	3575	:	804	7	6

AMERICA ON LONDON.

Sterling is reduced to American money *at par* by reversing the annexed operation: that is, as 4s. 6d. is to 1 Dollar, so is the given sum to the sum sought.

Reduce £401 7s. 1d. sterling to American money, at par.

s.	d.		Dollar		£	s.	d.		Dollars	Cents
As 4	6	:	1	: :	401	7	1	:	1783	80
12					20					
—					—					
54					8027					
					12					
					—					
					54)96325(1783,796					
					54					
					—					
					423 &c.					

If the exchange be not at par, the difference is to be computed after the sterling has been reduced to Dollars.

Reduce £982 16s. 8d. to American money; exchange at 2 per cent. above par.

s.	d.		Dollar		£	s.	d.		Dollars	Cents
As 4	6	:	1	: :	982	16	8	:	4368	15
					Dollars	Cents			Dollars	Cents
And as 102		:	100	: :	4368	15	:		4282	50

Reduce £804 7s. 6d. to American money; exchange at 2 per cent. under par.

s.	d.		Dollar		£	s.	d.		Dollars
As 4	6	:	1	: :	804	7	6	:	3575
					Dollars			Dollars	Cents
And as 100		:	102	: :	3575	:		3646	50

When the discount or premium is at any of the following rates, the operation may be thus performed.

At 1¼ per cent. discount, *i. e.* under par, multiply the Dollars by 80, and divide by 81.

2	50 ..... 51.
2½	40 ..... 41.
3¾	80 ..... 83.
4	25 ..... 26.
5	20 ..... 21.
6	50 ..... 53.
6¼	16 ..... 17.
7½	40 ..... 43.
8	25 ..... 27.
8¾	80 ..... 87.
10	10 ..... 11.

If the exchange be at a premium, *i. e.* above par, the rule should be reversed.

The Dollars are afterwards reduced to sterling as above.

AMSTERDAM ON AMERICA.

American money is reduced to Dutch by saying: as the rate of exchange is to 1 Florin, so is the given sum to the sum sought.

[For the Dutch monies of exchange, see page 28.]

Reduce 4964 Dollars 67 Cents to Dutch money; exchange at 36 Cents per Florin.

	Cents		Florin		Dollars	Cents		Florins	Stivers
As	36	:	1	::	4964	67	:	13790	15

36)496467(13790 15
36
136 &c.

AMERICA ON AMSTERDAM.

Dutch money is reduced to American by reversing the annexed operation: that is, as 1 Florin is to the rate of exchange, so is the given sum to the sum sought.

Reduce 13790 Florins 15 Stivers to American money; exchange at 36 Cents per Florin.

	Florin		Cents			Florins	Stivers		Dollars	Cents.
As	1	:	36	:	:	13790	15	:	4964	67
	20					20				
	20					275815				
						36				
						2,0)992934,0				

Ans. 496467 Cents.

HAMBURGH ON AMERICA.

American money is reduced to that of Hamburgh by saying: as the rate of exchange is to 1 Mark, so is the given sum to the sum sought.

[For the monies of exchange of Hamburgh, see page 65.]

Reduce 378 Dollars 95 Cents to Hamburgh money; exchange at 33 Cents per Mark banco.

	Cents		Mark		Dollars	Cents		Marks	Schill.	Pf.
As	33	:	1	::	378	95	:	1148	5	4

33)37895(1148 5 4
33
48 &c.

AMERICA ON HAMBURGH.

Hamburgh money is reduced to American by reversing the annexed operation: that is, as 1 Mark is to the rate of exchange so is the given sum to the sum sought.

Reduce 1148 Marks 5 Schillings 4 Pfenings banco to American money; exchange at 33 Cents per Mark banco.

	Mark		Cents			Marks	Schill.	Pf.		Dollars	Cents
As	1	:	33	:	:	1148	5	4	:	378	95
	16					16					
	16					18373					
	12					12					
	192					220480 × 33 ÷ 192 = 378,95					

FRANCE ON AMERICA.

American money is reduced to French by saying: as 1 Dollar is to the rate of exchange, so is the given sum to the sum sought.

[For the monies of exchange of France, see page 49.]

Reduce 1364 Dollars 60 Cents to French money; exchange at 5 Francs 30 Centimes per Dollar.

	Dollar		Francs	Cen.		Dollars	Cents		Francs	Centimes
As	1	:	5	30	::	1364	60	:	7232	38

AMERICA ON FRANCE.

French money is reduced to American by saying: as the rate of exchange is to 1 Dollar, so is the given sum to the sum sought.

Reduce 7232 Francs 38 Centimes to American money; exchange at 5 Francs 30 Centimes per Dollar.

	Francs	Cen.		Dollar		Francs	Centimes		Dollars	Cents
As	5	30	:	1	: :	7232	38	:	1364	60

WEST INDIES.

MONIES OF EXCHANGE.

12 Pence = 1 Shilling.
20 Shillings = 1 Pound currency.

[For the currencies and monies of the different islands, see the article WEST INDIES, vol. i.]

LONDON ON THE WEST INDIES.

West Indian currency is reduced to sterling by saying: as the rate of exchange is to 100, so is the given sum to the sum sought.

Reduce £778 16s. 4d. currency to sterling; exchange at £166 currency per £100 sterling.

As 166 : 100 :: £778 16s. 4d. Currency : £469 3s. 4d. Sterling

20

15576

12

166)18691600(112600

166

209 &c.

2,0)938,3 4

£469 3s. 4d. sterling.

WEST INDIES ON LONDON.

Sterling is reduced to West Indian currency by reversing the foregoing operation: that is, as 100 is to the rate of exchange, so is the given sum to the sum sought.

Reduce £469 3s. 4d. sterling to West Indian currency; exchange at £166 currency per £100 sterling.

As 100 : 166 :: £469 3s. 4d. Sterling : £778 16s. 4d. Currency

20

9383

12

112600

166

12)186916,00

2,0)1557,6 4

£778 16s. 4d. currency.

Currency at the following prices may be thus reduced to sterling.

At 50 multiply by 2 & divide by 3			At 75 multiply by 4 & divide by 7		
52½	40	61	77½	40	71
55	20	31	80	5	9
57½	40	63	82½	40	73
60	5	8	85	20	37
62½	8	13	87½	8	15
65	20	33	90	10	19
67½	40	67	92½	40	77
70	10	17	95	20	39
72½	40	69	97½	40	79

Sterling at the following prices may be thus reduced to currency.

At 50 multiply by 3 & divide by 2			At 75 multiply by 7 & divide by 4		
52½	61	40	77½	71	40
55	31	20	80	9	5
57½	63	40	82½	73	40
60	8	5	85	37	20
62½	13	8	87½	15	8
65	33	20	90	19	10
67½	67	40	92½	77	40
70	17	10	95	39	20
72½	69	40	97½	79	40

[For the damages on returned bills, and other laws and customs relating to Exchanges, see WEST INDIES, vol. i.]

EAST INDIES.

MONIES OF EXCHANGE.

The business of Exchange in India is chiefly carried on between the three Presidencies: viz. Bengal, Madras, and Bombay, which draw on each other at various dates, and mostly in the denominations of the Money of the place where the Bill is to be paid.

London draws on Bengal in Current Rupees, at 2s. more or less;

Or in Sicca Rupees at 16 per cent. above current Rupees.

On Madras, in Pagodas at 7s. 6d. more or less.

On Bombay, in Rupees at 2s. 2d. more or less.

Such bills are mostly at 60 or 90 days sight, but bills from those places on London are generally drawn at 6, 9, or 12 months sight, in which case the Sicca Rupee is valued at 2s. 6d.; the Bombay Rupee at 2s. 4d.; and the Pagoda of Madras at 8s. more or less.

Those Monies of Exchange are divided as follows:

BENGAL, CALCUTTA, &c.

12 Pice = 1 Anna. 16 Annas = 1 Rupee,
1 Sicca Rupee = 2s. 6d. sterling.

BOMBAY.

100 Rees = 1 Quarter. 4 Quarters = 1 Rupee.
1 Rupee = 2s. 4d. sterling.

MADRAS.

80 Cash = 1 Fanam. 45 Fanams = 1 Star Pagoda.
1 Star Pagoda = 8s. sterling.

To reduce any number of Rupees or Pagodas into sterling at a given rate of exchange, or the contrary, is an operation too simple to require illustration.

[For further particulars see EAST INDIES, vol. i.]

PROFIT AND LOSS ON EXCHANGES.

Besides the advantages which exchanges afford to commerce in discharging debts due in distant places, and transmitting property from one country to another, considerable profits are sometimes made by buying and selling Bills, and negociating them through different places.—In such business the Sellers of Bills are generally the Drawers, and the Buyers of Bills the Remitters: and it may tend to simplify the subject to consider a Bill of Exchange as any other saleable article; in which the advantage of the Drawer is, of course, to sell his Bill at the highest price, and of the Remitter to buy it at the lowest price.

There are three ways of making profit or loss on Bills of Exchange, namely:

1.—By buying and selling Bills at the same place.

2.—By Remittances and Returns directly between two places.

3.—By negociating Bills through more than two places; which is called *Arbitration of Exchange*, also *Indirect*, or *Circular Exchange*.

The profit or loss, either on the whole or per cent. on Bills bought and sold at the same place is ascertained in the same manner as on any other article of trade.

Example 1.—Suppose London buys a Bill on Hamburgh of 3180 Marks banco, exchange 33s. 4d. Flemish per £ sterling, and sells the same at 33s. 1½d. Flemish what is the gain?

	s.	d. Flem.	£ sterling		Marks		£	s.	
As	33	4	: 1	: :	3180	:	254	8	bought for.
And as	33	1½	: 1	: :	3180	:	256	0	sold for.

see page 23.

1 12 gain on the whole.

	£	s.		s.			
Again, as	254	8	:	32	: :	100	: ⅝ gain per cent.

	s.	d. Flemish.		d. Flemish.		Marks		Marks	
Or thus, as	33	1½	:	2½	: :	3180	:	20	gain on the whole = £1 12s. sterling.
And as	33	1½	:	2½	: :	100	:	⅝	gain per cent.

Example 2.—Suppose London buys a Bill on Cadiz of 1000 Dollars, at 36d. sterling per Dollar, and sells it for 37d. per Dollar, the gain on the whole is evidently 1000d. or £1 3s. 4d.; and the gain 2⅞ per cent.: for

	Dollar		d.		Dollars		£	s.	d.	
As	1	:	1	: :	1000	:	4	3	4	gain on the whole.
And as	36d.	:	1	: :	100d.	:			2⅞	gain per cent.

From the first example it will be seen, that it is the interest of the London Buyer or Remitter to pay the highest exchange for a Bill on a place which gives the uncertain price to London; and that the reverse is the interest of the Drawer or Seller. And from the second example it is obvious, that it is the interest of the London Buyer or Remitter to pay the lowest exchange for a Bill on a place to which London gives the uncertain price; and that the reverse is the interest of the Drawer or Seller. Hence the two following rules.

1.—*On a place to which London gives the* CERTAIN PRICE *a Bill should be drawn at the lowest course, and remitted at the highest.*

2.—*On a place to which London gives the* UNCERTAIN PRICE *a Bill should be drawn at the highest course, and remitted at the lowest.*

The above rules apply to any other places as well as London.

REMITTANCES AND RETURNS.

Bills of Exchange are sometimes bought and remitted directly to the place on which they are drawn, with orders to have Bills in return if the prices be favourable: and it should be observed that the reciprocal courses of exchange between two places should always differ, so as to be nearly equal to the interest of money and the expenses of remittance. Thus, the course of London on Dublin should differ about 1 per cent. from that of Dublin on London, in order to afford the Remitter from either place a regular profit on his Remittances and Returns on Bills at 21 days sight, the usual Term.

Suppose, for example, L of London purchases a Bill on Dublin, at 21 days sight, of £112 Irish for £100 English, which he remits to his agent at Dublin, desiring him to make Returns in Bills on London at 21 days sight; and suppose a Bill of £100 English is remitted back, which costs only £111 Irish, there is £1 Irish per cent. gained by the transaction: and the same would take place had the remittance been first made from Dublin on the above terms.

Now, to compute how much the difference here ought to be, the interest of 56 days must be reckoned (the usual time such Bills take in making returns); and this, with brokerage, postage, &c. will amount to 1 per cent. nearly; which is reckoned a *Fair Difference* in the exchange between London and Dublin on Bills of the above date.

It may be observed, however, that the difference is not always equivalent to the interest and expenses, but fluctuates according to circumstances, affording sometimes room for profitable operations.

The following is an example of a Bill sent from London to Hamburgh, to have Returns on London.

£842 12s. 1d. sterling on Hamburgh, at 3 usances, at 31s. 8d. Flemish per £ sterling, ... 10,000 Mks. bco.

	Mks. bco.	Sh.	
Commission, ½ per cent.	50	0	
Double brokerage, 2 per mille	20	0	
Postage	3	4	
Discount, 82 days, at 5 per cent.	112	4	
.....			185 8
Net proceeds in Marks banco			9814 8

Returns made in 3 Bills, namely:

£500	0	0	sterling, at 3 us. at 30s. 10½d.	5789 1
200	0	0	at 2 us. at 30s. 11d.	2318 12
146	16	4	at 2 us. at 31s. 0d.	1706 11
846	16	4	Returns.	9814 8
842	2	1	Remittance.	

£4 14 3 Gain, which is not quite equivalent to the discount and postage of the Returns; but had the course of Hamburgh on London been 30s. 9d. it would have produced the regular profit. Thus, 10d. Flemish per £ sterling may be reckoned a *Fair Difference* between London and Hamburgh at usance.

When the Returns are to be made directly, the remittances are discounted as above; but it may be remarked, that the interest of money on the Continent is not limited as in England, but fluctuates according to the plenty or scarcity of cash or the credit of paper. In exchange operations it is generally reckoned at ½ per cent. per month.

ARBITRATION OF EXCHANGE.

Arbitration of Exchange is a comparison between the courses of exchange of several places, in order to ascertain the most advantageous method of drawing or remitting Bills. It is distinguished into Simple and Compound Arbitration: the former comprehends the exchanges of three places only, and the latter of more than three places.

SIMPLE ARBITRATION

Is a comparison between the exchanges of two places with respect to a third—that is to say, it is a method of finding such a rate of exchange between two places as shall be in proportion to the rates quoted between each of them and a third place. The exchange thus determined is called the *Arbitrated Price.*

If, for example, the course between London and Paris be 24 Francs for £1 sterling, and between Paris and Amsterdam 54d. Flemish for 3 Francs, (that is, 36s. Flemish for 24 Francs,) the arbitrated price between London and Amsterdam through Paris, is evidently 36s. Flemish for £1 sterling; for as 3 Fr. : 54d. Flem. :: 24 Fr. : 36s. Flem.

Now, when the actual or direct price (as seen by a quotation or otherwise advised) is found to differ from the arbitrated price, advantage may be made by drawing or remitting indirectly; that is, by drawing on one place through another, as on Amsterdam through Paris: which may be performed in three different ways.

1.—London may draw on Paris, and order his correspondent there to draw on Amsterdam.

2.—London may draw on Paris, and order his correspondent in Amsterdam to remit the same sum to Paris.

3.—London may order his correspondent at Paris to draw on Amsterdam, and to remit the value to London.

The operation of remitting indirectly, or of remitting to one place through another, as to Amsterdam through Paris, may be likewise performed in three different ways.

1.—London may remit to Paris, and order his correspondent there to remit the sum to Amsterdam.

2.—London may remit to Paris, and order his correspondent in Amsterdam to draw on Paris.

3.—London may take Bills on Paris, and remit them to Amsterdam, there to be negotiated.

In the foregoing questions, the profit or loss is ascertained on an operation already completed: but in arbitration it is ascertained beforehand, and the different results are compared, in order to determine the most advantageous mode of proceeding.

To exemplify this by familiar illustrations, suppose the arbitrated price between London and Amsterdam to be, as before stated, 36s. Flemish for £1 sterling; and suppose the direct course to be 37s. Flemish; then London, by drawing directly on Amsterdam, must give 37s. Flemish for £1 sterling; whereas, by drawing through Paris he will give only 36s. Flemish for £1 sterling: it is therefore the interest of London to draw indirectly on Amsterdam through Paris.

On the contrary, if London remits directly to Amsterdam he will receive 37s. Flemish for £1 sterling; whereas, by remitting through Paris, he will receive only 36s. Flemish: it is the interest of London, therefore, to remit directly to Amsterdam.

Example 2.—Suppose the exchange of London and Lisbon to be at 68d. per Milree, and that of Lisbon on Madrid 500 Rees per Dollar, the arbitrated price between London and Madrid is 34d. sterling per Dollar; for, as 1000 Rees : 68d. :: 500 Rees : 34d. But if the direct exchange of London on Madrid be 35d. sterling per Dollar, then London, by remitting directly to Madrid, must pay 35d. for every Dollar; whereas, by remitting through Lisbon, he will pay only 34d.: it is, therefore, the interest of London to remit indirectly to Madrid through Lisbon.

On the contrary, if London draws directly on Madrid, he will receive 35d. sterling per Dollar; whereas by drawing indirectly through Lisbon, he will receive only 34d.: it is, therefore, the interest of London to draw directly on Madrid.

From these examples, combined with the principles laid down in page 105, the two following rules are manifest.

RULE 1.—*Where London gives the* CERTAIN PRICE, *draw through that place which produces the lowest arbitrated price, and remit through that which produces the highest.*

RULE 2.—*Where London gives the* UNCERTAIN PRICE, *draw through that place which produces the highest arbitrated price, and remit through that which produces the lowest.*

What is here said of London will equally apply to any other place from whence the operation is made.

In order further to exemplify Simple Arbitration of Exchange, the following places are selected as having the most frequent communication with each other in business of this kind; and London is made the centre of operations.

LONDON AND AMSTERDAM.

PROPORTIONAL EXCHANGE.

LONDON QUOTATION. *(Explained page 19.)*		AMSTERDAM QUOTATION. *(Explained page 28.)*	
On Amsterdam . . .	34 7		
Genoa	47	. . . . .	86
Hamburgh	34 2	. . . . .	$33\frac{1}{8}$
Leghorn	$51\frac{1}{2}$	. . . . .	$92\frac{3}{4}$
Lisbon	68	. . . . .	48
Madrid	42	. . . . .	96
Paris	23 8	. . . . .	$53\frac{1}{2}$

The arbitrated or proportional price of exchange between London and Amsterdam, with respect to any of the above places, is found either by the Rule of Three, or by the Chain Rule, as in the following examples; and from such proportional prices, compared with the direct or actual prices, as stated in the quotations, rules are deduced and examples given, for drawing and remitting to the greatest advantage.

LONDON AND AMSTERDAM THROUGH GENOA.

If the exchange of London on Genoa be 47d. sterling per Pezza of $5\frac{1}{4}$ Lire, and that of Amsterdam on Genoa 86 Grotes Flemish per Pezza, what is the proportional exchange between London and Amsterdam through Genoa? that is, how many Shillings and Grotes Flemish are equal to £1 sterling?

Because 47d. give 1 Pezza, and this Pezza in Amsterdam gives 86 Grotes Flemish, say—

	d.		Grotes		£		Sh.	Gr. Flem.
As	47	:	86	: :	1	:	36	7

240

——12)

47)20640(439$\frac{7}{47}$

188

——Ans. 36 Sh. 7 Gr. Flemish

184 &c. for £1 sterling.

By the Chain Rule.

			1 Pound sterling.
1	Pound sterling	=	240 Pence.
47	Pence	=	1 Pezza.
1	Pezza	=	86 Grotes Flemish.
12	Grotes	=	1 Shilling Flemish.

Hence, 1 Pound or 240 Pence multiplied by 86, and divided by 47 and by 12, will give the answer in Shillings Flemish, as above.

Thus, 86

240

564)20640(36,7

1692

3720

3384

336 = 7 Gr. nearly.

LONDON AND AMSTERDAM THROUGH HAMBURGH.

If the exchange of London on Hamburgh be 34 Shillings 2 Grotes Flemish banco per £ sterling, and that of Amsterdam on Hamburgh $33\frac{3}{8}$ Stivers per Rixdollar of 2 Marks, required the proportional exchange between London and Amsterdam through Hamburgh?

Because £1 sterling gives 34 Shillings 2 Grotes Flemish in Hamburgh, and 2 Marks give $33\frac{3}{8}$ Stivers in Amsterdam, say (reducing the Marks and the Stivers into Flemish money)—

	Marks		Stivers		Sh.	Gr. Fl.		Sh.	Gr. Fl.
As	2	:	$33\frac{3}{8}$	: :	34	2	:	35	$7\frac{1}{2}$
	16		2		12				
	—		—		—				
	32		$66\frac{3}{4}$		410				
	2				$66\frac{3}{4}$				
	—				——12)				
	64				64)27367$\frac{1}{2}$(427$\frac{39}{64}$				
					256				
					——Ans. 35 Sh. $7\frac{1}{2}$ Gr. for £1 sterling.				
					176 &c.				

By the Chain Rule.

			1 Pound sterling.
1	Pound sterl.	=	34 Shil. 2 Grotes in Hamburgh.
8	Shill. Flem.	=	3 Marks.
2	Marks	=	$33\frac{3}{8}$ Stivers.
6	Stivers	=	1 Shill. Flemish in Amsterdam

Hence, 34 Shillings 2 Grotes Flemish multiplied by 3 and by $33\frac{3}{8}$, and divided by 6, by 2, and by 8; or, (expunging the common divisors,) multiplied by 267, and divided by 256, will give the answer in Shillings Flemish, as above.

LONDON AND AMSTERDAM THROUGH LEGHORN.

If the exchange of London on Leghorn be 51½d. sterling per Pezza, and that of Amsterdam on Genoa 92¾ Grotes Flemish per Pezza, what is the proportional exchange between London and Amsterdam through Leghorn?

Because 51½d. in London give 1 Pezza, and this Pezza in Amsterdam gives 92¾ Grotes Flemish, say—

d.		Grotes		d.		Sh.	Grotes
As 51½	:	92¾	: :	240	:	36	0¼
2				92¾			
103				22260			
				2			
				——12)			
				103)44520(432 $\frac{24}{103}$			
				412&c.——			

Ans. 36 Sh. 0¼ Gr. for £1 sterling.

By the Chain Rule.

£1 sterling.

£1 sterling	=	240 Pence.
51½ Pence	=	1 Pezza.
1 Pezza	=	92¾ Grotes Flemish.
12 Grotes	=	1 Shilling Flemish.

Result as above.

LONDON AND AMSTERDAM THROUGH LISBON.

If the exchange of London on Lisbon be 68d. sterling per Milree, and that of Amsterdam on Lisbon 48 Grotes Flemish per old Crusado, what is the proportional exchange between London and Amsterdam through Lisbon.

Because 68d. in London give 1 Milree, and 1 old Crusado, or 400 Rees, give 48 Grotes Flemish in Amsterdam, say—

Rees		Grotes		Rees		Grotes
As 400	:	48	: :	1000	:	120
d.		Grotes		d.		Sh. Gr. Fl.
And as 68	:	120	: :	240	:	35 3½
				120		
				——12)		
				68)28800(423 $\frac{36}{68}$		
				272&c.——		

Ans. 35 Sh. 3½ Gr. for £1 sterling.

By the Chain Rule.

£1 sterling.

£1 sterling	=	240 Pence.
68 Pence	=	1000 Rees.
400 Rees	=	48 Grotes Flemish.
12 Grotes	=	1 Shilling Flemish.

Result as above.

LONDON AND AMSTERDAM THROUGH MADRID.

If the exchange of London on Madrid be 42d. sterling per Dollar of plate, and that of Amsterdam on Madrid 96 Grotes Flemish per Ducat of plate, what is the proportional exchange between London and Amsterdam through Madrid?

Because 42d. in London give 1 Dollar or 272 Maravedis, and because 1 Ducat or 375 Maravedis give 96 Grotes in Amsterdam, say—

Maravedis		Grotes		Maravedis		Grotes
As 375	:	96	: :	272	:	69⅔
d.		Grotes		d.		Sh. Gr. Fl.
And as 42	:	69⅔	: :	240	:	33 2
				69⅔		
				——12)		
				42)16720(398		
				126&c.——		

Ans. 33 Sh. 2 Gr. for £1 sterling.

By the Chain Rule.

£1 sterling.

£1 sterling	=	240 Pence.
42 Pence	=	272 Maravedis.
375 Maravedis	=	96 Grotes Flemish.
12 Grotes	=	1 Shilling Flemish.

Result as above.

LONDON AND AMSTERDAM THROUGH PARIS.

If the exchange of London on Paris be at 23 Livres 8 Sous per £ sterling, and that of Amsterdam on Paris 53½ Grotes Flemish per Ecu of 3 Francs, what is the proportional exchange between London and Amsterdam through Paris?

Because £1 sterling gives 23 Livres 8 Sous in Paris, and because 3 Francs give 53½ Grotes Flemish in Amsterdam, say—

				Livres	Sous		Francs	Cen.
As 81	:	80	: :	23	8	:	23	11
Francs		Grotes		Francs			Sh.	Gr. Fl.
And as 3	:	53½	: :	23,11		:	34	4½
				53½				
				——12)				
				3)1236,38(412,12				

Ans. 34 Sh. 4½ Gr. for £1 sterling.

By the Chain Rule.

£1 sterling.

£1 sterling	=	23 Livres 8 Sous.
81 Livres	=	80 Francs.
3 Francs	=	53½ Grotes.
12 Grotes	=	1 Shilling Flemish.

Result as above.

RECAPITULATION.

LONDON AND AMSTERDAM.

RECAPITULATION of the proportional exchanges, as calculated in the three preceding pages, with rules for drawing and remitting to the greatest advantage.

	Sh.	Grotes	
The arbitrated price through GENOA is	36	7	Flemish—see page 110
through HAMBURGH	35	7½	 110
through LEGHORN	36	0¼	 111
through LISBON	35	3½	 111
through MADRID	33	2	 111
through PARIS	34	4⅓	 111
And the direct course of LONDON on AMSTERDAM	34	7	 109

As London gives the certain price to Amsterdam, that is, £1 sterling for a variable number of Shillings Flemish, the most advantageous place through which to remit is that which gives the highest price; and, on the contrary, the most advantageous place through which to draw is that which gives the lowest price; according to RULE 1, page 108.

From the above statements, therefore, it appears—1st, that if London has to *remit* to Amsterdam, the indirect courses through Hamburgh, Genoa, Lisbon, and Leghorn, are more advantageous than the direct course, and that Genoa is the most advantageous place through which to remit:—2dly, that if London has to *draw* on Amsterdam, the indirect courses through Madrid and Paris are more advantageous than the direct course, and that Madrid is the most advantageous place through which to draw.

The profit or loss per cent. occasioned by one mode of operation, instead of another, may be known in the following manner.

Thus, in the case of Genoa—As 34 Shill. 7 Grotes : 36 Shill. 7 Grotes :: 100 : $105\frac{6}{8}\frac{4}{5}$, or $105\frac{3}{4}$ nearly.

Hence it appears, that $5\frac{3}{4}$ per cent. will be gained by remitting to Amsterdam through Genoa, instead of remitting directly to Amsterdam; and that the same profit will accrue by drawing directly on Amsterdam, instead of drawing through Genoa; but in computations of this kind allowance should be made for the difference of charges between direct and indirect operations.

The foregoing rules respecting Amsterdam will equally apply to Hamburgh, Paris, or any other place to which London gives the certain; but where London gives the uncertain, the rules must be reversed, as in the following examples of Genoa.

LONDON AND GENOA.

PROPORTIONAL EXCHANGE.

QUOTATION AT LONDON, *(Explained page 19.)*			QUOTATION FROM GENOA, *(Explained page 61)*	
On Genoa	47			
Amsterdam	36	7		85
Hamburgh	34	2		$45\frac{1}{3}$
Leghorn	$51\frac{1}{2}$			$123\frac{3}{4}$
Lisbon	68			718
Madrid	42			617
Paris	23	8		$94\frac{1}{3}$

From the above quotations, it is required to find the proportional exchange between London and Genoa, with respect to each of the other places, and thence to determine through what place it may be most advantageous for London to remit to, or draw on, Genoa, and whether direct or indirect exchange is most favourable.

LONDON AND GENOA THROUGH AMSTERDAM.

If the exchange of London on Amsterdam be 36 Shillings 7 Pence Flemish per £ sterling, and that of Genoa on Amsterdam 85 Grotes Flemish per Pezza of $5\frac{3}{4}$ Lire, what is the proportional exchange between London and Genoa through Amsterdam—that is, how many Pence sterling are equal to 1 Pezza?

Because £1 sterling gives 36 Shillings 7 Grotes Flemish in Amsterdam, and 85 Grotes Flemish in Genoa give 1 Pezza, say—

	Shillings	Grotes		Pence		Grotes		Pence
As	36	7	:	240	::	85	:	$46\frac{1}{2}$
	12			85				
	439			439)20400($46\frac{206}{439}$				
				1756				
				2840 &c.				

Answer $46\frac{1}{2}$ Pence nearly for 1 Pezza.

By the Chain Rule.

1 Pezza.

1 Pezza	=	85 Grotes Flemish.
12 Grotes	=	1 Shilling Flemish.
36 Shillings 7 Grotes	=	240 Pence sterling.

Hence, 85 Grotes multiplied by 240, and divided by 12, and by 36 Shillings 7 Grotes—that is, divided by 439, will give the answer in Pence sterling, as above.

LONDON AND GENOA THROUGH LEGHORN.

If the exchange of London on Leghorn be $51\frac{1}{2}$d. sterling per Pezza of 8 Reals, and that of Genoa on Leghorn $123\frac{3}{4}$ Soldi fuori banco per Pezza of 8 Reals, what is the proportional exchange between London and Genoa through Leghorn?

Because $51\frac{1}{2}$d. give 1 Pezza in Leghorn, and this same Pezza in Genoa gives $123\frac{3}{4}$ Soldi, say—

	Soldi		Pence		Pezza of Genoa		Soldi		Pence
As	$123\frac{3}{4}$	:	$51\frac{1}{2}$	::	1	or	115	:	$47\frac{5}{8}$
	4		4				206		
	495		206				495)23690($47\frac{85}{99}$		
							1980 &c.		

Ans. $47\frac{5}{8}$d. nearly.

By the Chain Rule.

1 Pezza in Genoa.

1 Pezza in Genoa	=	115 Soldi.
$123\frac{3}{4}$ Soldi	=	1 Pezza in Leghorn.
1 Pezza in Leghorn	=	$51\frac{1}{2}$d. sterling.

Result as above.

LONDON AND GENOA THROUGH HAMBURGH.

If the exchange of London on Hamburgh be 34 Shillings 2 Grotes Flemish per £ sterling, and the exchange of Genoa on Hamburgh $45\frac{1}{3}$ Soldi per Mark banco, what is the proportional exchange between London and Genoa through Hamburgh?

Because £1 sterling gives 34 Shillings 2 Grotes Flemish in Hamburgh, and 1 Mark or 32 Grotes in Genoa give 1 Pezza, say—

	Shillings	Grotes		Pence		Grotes		Pence
As	34	2	:	240	::	32	:	$18\frac{3}{4}$
	12			32				
	410			41,0)768,0($18\frac{30}{41}$				
				41				
				358 &c.				

	Soldi		Pence		Pezza		Soldi		Pence
And as	$45\frac{1}{3}$	:	$18\frac{3}{4}$	::	1	or	115	:	$47\frac{1}{2}$ nearly
	3						$\times 18\frac{3}{4} \times 3$		
	136						136)6468($47\frac{76}{136}$		
							544 &c.		

Ans. $47\frac{1}{2}$ Pence for 1 Pezza.

By the Chain Rule.

1 Pezza.

1	Pezza	=	115 Soldi.
$45\frac{1}{3}$	Soldi	=	1 Mark.
1	Mark	=	32 Grotes Flemish.
410	Grotes	=	240 Pence sterling.

Result as above.

LONDON AND GENOA THROUGH LISBON.

If the exchange of London on Lisbon be 68d. per Milree, and that of Genoa on Lisbon 718 Rees per Pezza of $5\frac{3}{4}$ Lire, what is the proportional exchange between London and Genoa through Lisbon?

Because 1000 Rees give 68d. in London, and 718 Rees in Genoa give 1 Pezza, say—

	Rees		Pence		Rees		Pence
As	1000	:	68	::	718	:	$48\frac{5}{8}$
					68		
					1,000)48,824		

Ans. $48\frac{5}{8}$d. nearly.

By the Chain Rule.

1 Pezza.

1 Pezza	=	718 Rees.
1000 Rees	=	68 Pence.

Result as above.

LONDON AND GENOA THROUGH MADRID.

If the exchange of London on Madrid be 42d. sterling per Dollar of plate, and that of Genoa on Madrid 617 Maravedis of plate per Scudo d'oro, what is the proportional exchange between London and Genoa through Madrid?

Because 42d. sterling give 1 Dollar, or 272 Maravedis of plate, and because 617 Maravedis in Genoa give 1 Scudo d'oro, or 10 Lire 14 Soldi fuori banco, say—

	Maravedis		Pence		Maravedis		Pence
As	272	:	42	::	617	:	$95\frac{1}{4}$

42

272)25914($95\frac{74}{272}$, or $95\frac{1}{4}$ nearly.
2448

1434 &c.

	Lire	Sol.		Pence		Pezza	Lire	Sol		Pence
And as	10	14	:	$95\frac{1}{4}$	::	1 or	5	15	:	$51\frac{1}{5}$
	20						20			
	214						115			
							$95\frac{1}{4}$			

214)10953 ($51\frac{30}{214}$
1070

253 &c.

Ans. $51\frac{1}{5}$d. sterling for 1 Pezza nearly.

By the Chain Rule.

		1 Pezza.
1 Pezza	=	115 Soldi.
214 Soldi	=	617 Maravedis.
272 Maravedis	=	1 Dollar of plate.
1 Dollar	=	42 Pence.

Result as above.

LONDON AND GENOA THROUGH PARIS.

If the exchange of London on Paris be 23 Livres 8 Sous per £ sterling, and the exchange of Genoa on Paris $94\frac{1}{3}$ Sous in Francs per Pezza of $5\frac{3}{4}$ Lire, what is the proportional exchange between London and Genoa through Paris?

Because £1 sterling gives 23 Livres 8 Sous, and because $94\frac{1}{3}$ Sous in Francs give 1 Pezza in Genoa, say—

					Livres	Sous		Sous in Francs
As	81	:	80	::	23	8	:	$462\frac{2}{9}$
					20			
					468			
					80			

81)37440($462\frac{2}{9}$
324

504 &c.

	Sous		Pence		Sous		Pence
And as	$462\frac{2}{9}$	:	240	::	$94\frac{1}{3}$	:	49
	9		$94\frac{1}{3}$				
	4160		22640				
			9				

416,0)20376,0(49
1664

3736

Ans. 49d. sterling for 1 Pezza.

By the Chain Rule.

		1 Pezza.
1 Pezza	=	$94\frac{1}{3}$ Sous in Francs.
80 Sous in Francs	=	81 Sous in Livres.
468 Sous in Livres	=	240 Pence sterling.

Result as above.

RECAPITULATION.

LONDON AND GENOA.

RECAPITULATION of the proportional exchanges, or arbitrated prices, as calculated in the two preceding pages, with rules for drawing and remitting to the greatest advantage.

The arbitrated or indirect price through AMSTERDAM is.... 46½ Pence—see page 114
through HAMBURGH 47½ 114
through LEGHORN 47⅚ 114
through LISBON 48⅚ 114
through MADRID 51⅕ 115
through PARIS 49 115
And the direct course of LONDON on GENOA is 47 113

As London gives the uncertain price to Genoa, that is, a variable number of Pence for 1 Pezza, the most advantageous place through which to remit is that which gives the lowest price; and, on the contrary, the most advantageous place through which to draw is that which gives the highest price; according to RULE 2, page 108.

From the above statements, therefore, it appears—1st, that if London has to *remit* to Genoa, the indirect course through Amsterdam is more advantageous than the direct course:—2dly, that if London has to *draw* on Genoa, the indirect courses through any of the above places, except Amsterdam, are more advantageous than the direct course, and that Madrid is the most advantageous place of all to draw through.

The profit or loss per cent. occasioned by one mode of operation, instead of another, may be thus found, as in the case of Madrid.

As 47 : 51⅕ :: 100 : 109

Hence it appears, that 9 per cent. may be gained by drawing on Genoa through Madrid, instead of drawing directly on Genoa; and that the same profit will be made by remitting directly to Genoa, instead of remitting through Madrid: but in computations of this kind allowance should be made for the difference of charges between direct and indirect operations.

The foregoing rules for negotiating Bills are given after the manner of the most approved writers on Exchange, and though it is presumed they are sufficiently clear as well as correct, yet the following rules and illustrations are added, with a view of reducing the question of Arbitration to a still greater degree of simplicity.

SIMPLE ARBITRATION

Further explained; with new Rules and Illustrations.

SIMPLE ARBITRATION ought to be well understood before any higher Rule is attempted. It is not only the foundation and principle of Compound Arbitration, but is in itself a problem of more real utility and general application, as few speculations in Exchange are extended to more than three places in one operation.

It has been already shewn, that whether the arbitrated price is above or below the advised price, an advantage is equally to be made, and the greater the difference is, the greater will be the profit; but as the Courses of Exchange are liable to continual fluctuation, despatch is necessary in order to secure any favourable prices that may offer; and as an operation between three places can be performed sooner than between any greater number, it is evidently the most safe, as well as the most easy and practicable kind of Arbitration.*

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* The following comparison between Simple and Compound Arbitration, made by *M. Corbaux*, in his *Dictionnaire des Arbitrages*, seems here to deserve quotation.

" It is very easy to fancy problems and theories in Compound Arbitration, where great advantages might be " made by numerous combinations of Exchange, but seldom does any opportunity occur in practice of realizing " such speculations. On the contrary, men of experience are satisfied with combining the Exchanges of three " places only (as in Simple Arbitration,) and there are few instances of the kind that will not afford room for a " reasonable profit."

The *Dictionnaire des Arbitrages* may be considered the most elaborate work ever published on this subject. It was printed at Paris in 1802, in two large volumes quarto, and contains, among other useful matter, about 900 pages of tables, which shew the arbitrated price *(pair proportionnel)* between the principal places of exchange in Europe, taken two by two with respect to Paris, this city being made the centre of operation.

Various other tables, both of natural numbers and logarithms, have been published by different persons for the more easy solution of Arbitration, and even triangles have been constructed for this purpose (see *Postlethwayt's Dictionary of Commerce*, vol. 1, page 94); but geometrical diagrams do not seem at all to illustrate the Problem.

A graphic operation, however of a very useful and ingenious description, was published in London a few years ago, in which, scales of the monies of exchange of the principal places in Lloyd's List, are so graduated and arranged, that the arbitrated price between any two of those places with respect to a third, may be immediately found by the application of a right line. The invention is by *William Hyde Wollaston, M.D.—S.* and *F.R.S.*

Another kind of scale, for facilitating operations in Exchange, &c. has been lately invented by *William Blake, Esq. F.R.S.* entitled a Logometric Scale of Exchanges, Bullion, Stocks, Monies, Weights, and Measures. It is constructed on the principle of Gunter's sliding-rule, and is well adapted for the ready solution of many useful problems.

In dwelling so long on the explanations of this problem, numerous repetitions must occur, which are, however, more excusable than omissions. Indeed, in a large work, repetitions are unavoidable where perspicuity is the chief object; and it has been the Author's principal endeavour to render Arbitration of Exchange more easy and accessible than it has been hitherto considered, especially in England, where merchants are said to be inferior to their neighbours on the continent in this branch of commercial science, and perhaps in this alone.

As every branch of science is difficult, in proportion as it is complex, the best mode of simplifying a problem is to divide it, so as to distinguish its component parts, and then to consider each division separately. Now the question before us may be distinguished under the three following heads.

1.—To find the arbitrated price of exchange.
2.—To compare it with the advised price.
3.—To draw and remit according to the comparison.

The arbitrated price would be always obvious without any calculation, if the monies of exchange were of one denomination; for the problem is founded on the FIRST AXIOM OF EUCLID, viz. "*Things that are equal to one and the same thing are equal to one another.*"

Thus, if the exchange of London on Amsterdam be 33 Shillings Flemish, and on Hamburgh 34, these two sums, according to the Axiom, are equal to one another, being both equal to the Pound sterling. Hence the arbitrated price would be 33 Shillings Flemish of Amsterdam for 34 Shillings Flemish of Hamburgh, if those places exchanged with each other in Shillings; but Amsterdam gives Hamburgh an uncertain number of Stivers for the Dollar of Exchange, and therefore the proportion between these different denominations of money must be found by the rule of proportion. Thus, as 33s. of Hamburgh : 34s. of Amsterdam :: 1 Dollar : $31\frac{1}{17}$ Stivers. Hence the arbitrated price is $31\frac{1}{17}$ Stivers of Holland, for 2 Marks of Hamburgh.

The following example contains all the variety that can occur in finding the arbitrated price.

If the exchange of London on Paris be 25, and on Cadiz 40, what is the arbitrated price between Paris and Cadiz—that is, how many Francs should equal the Doubloon of 4 Piastres?

Here the Pound sterling equals 25 Francs, and the same Pound equals 6 Piastres; for, as 40d. : 1 Piastre :: 240d. : 6 Piastres. Hence (per the Axiom,) 6 Piastres = 25 Francs; and therefore 4 Piastres (the Doubloon) = $16\frac{2}{3}$ Francs, the arbitrated price; for, as 6 Piastres : 25 Francs :: 4 Piastres : $16\frac{2}{3}$ Francs.

Or thus, by the Chain Rule.

1 Doubloon.
1 Doubloon = 4 Piastres.
1 Piastre = 40 Pence sterling.
240 Pence = 25 Francs.

Hence, $\frac{4 \times 40 \times 25}{240} = \frac{50}{3} = 16\frac{2}{3}$ Francs.

The second part of this problem, that of comparing the arbitrated and advised prices, is no more than to observe which price is cheapest or dearest to a place, the same as to an individual.

Thus, suppose the arbitrated price between Paris and Cadiz be, as above, $16\frac{2}{3}$ Francs for the Doubloon, and the advised price 16, the latter is evidently best for Paris, and the former for Cadiz; it being the interest of Paris to buy the Doubloon at the lowest price, and the interest of Cadiz to sell it at the highest price. This being understood, the following is the rule to be observed.

GENERAL RULE.

Draw upon the place where the arbitrated price is better for that place than the advised price; and remit to the place where it is worse.

Thus, in the foregoing comparison, London should draw on Cadiz, where the arbitrated price is better than the advised price; and should remit to Paris, where it is worse.

Suppose London exchanges on Amsterdam at 34 10, and on Hamburgh at 33 5; and suppose the advised course of exchange between Amsterdam and Hamburgh is 32 Stivers for the Dollar; how should London draw and remit, and what profit presents on a bill of £100?

As 33s. 5d. : 34s. 10d. :: 2 Marks : $33\frac{243}{401}$ Stivers, the arbitrated price, which is better for Hamburgh than the advised price; therefore, (according to the above Rule,) draw on Hamburgh, and remit to Amsterdam. Thus, your draft, which sells for £100 at 33 5, will amount to 1253 Marks 2 Sols: this sum, turned into Dutch money at 32 Stivers, will produce 1002 Guilders 10 Stivers; and a bill on Amsterdam for the amount at 34 10 will cost only £95 18s. 8d.

For, as £1 sterling : 33s. 5d. :: £100 : 1253 Marks 2 Sols.
And, as 2 Marks : 32 Stivers :: 1253 Marks 2 Sols : 1002 Guilders 10 Stivers.
Again, as 34s. 10d. : £1 sterling :: 1002 Guilders 10 Stivers : £95 18s. 8d.

Hence, the profit which presents in a draft of £100 sterling is £4 1s. 4d. The money you receive for your draft will pay for your remittance, with the above surplus, and your debit at Hamburgh will be paid by your credit at Amsterdam.

But if, on the contrary, the advised price of exchange had been 34¼, this would be better

than the arbitrated price for Hamburgh, and therefore you should draw on Amsterdam: thus—£100 at 34 10 = 1045 Guilders, which, at 34¼ Stivers = 1220 Marks 7 S. 6 F.; and this bill at 33 5 will cost only £97 7s. 10d.; the profit, therefore, is £2 12s. 2d. The money you receive for your draft will pay for your remittance, with this surplus, and your debit at Amsterdam will be paid by your credit at Hamburgh.

The following example, which is taken from a real operation, contains as much variety as can occur in Problems of this kind.

In March, 1802, the exchanges were (according to Lloyd's List,) London on Amsterdam 10 16, and on Cadiz 37; and, according to the Quotation of Amsterdam, the exchange of that place on Cadiz was 107.

London purchased bills to the amount of 10,000 Piastres, and remitted them to Cadiz, desiring to have returns in bills on Amsterdam; but when the remittance reached Cadiz, the exchange with Amsterdam had fallen to 104.

London also drew on Amsterdam for the amount, and the operation stood thus—
10,000 Piastres at 37d. = £1541 13s. 4d. which sum, converted to Florins at

		Fl. Curr.	Stiv
10 Florins 16 Stivers per £ sterling	=	16,650	0
	Ducats		
10,000 Piastres reduced to Ducats of 375 Maravedis	= 7,253⅓		
Commission, brokerage, and discount	= 217⅓		
	7,036		
7,036 Ducats at 104, drawn for, deducting 3 per cent. discount		17,734	15
	Gain	1,084	15

Hence, the profit on this operation was about 7 per cent.; and had the exchange kept up, that is, had the Ducat been negotiated at 107 per Ducat, the gain would have been above 10 per cent.—which shews the necessity of despatch in such speculations.

The reason for thus drawing and remitting is founded on the General Rule, and the arbitrated price is determined in the following manner:

First, find how many Pence sterling the Ducat is worth; thus—

Maravedis	Pence sterling	Maravedis	Pence sterling.		£	Florins	Stivers	Pence sterling	Pence Flemish.
As 272	: 37	:: 375	: 51.—Then, as		1	: 10	16	:: 51	: 91⅘

Or thus, 1 Ducat.

1 Ducat = 375 Maravedis.
272 Maravedis = 37 Pence sterling.
240 Pence sterling = 432 Pence Flemish.

Reduced gives 91⅘d. nearly.

Here the arbitrated price is 91⅘d. Flemish for the Ducat, but the real price is 104. Thus the former is the most favourable for Amsterdam, and therefore, (according to the Rule, page 119,) London should draw on Amsterdam and remit to Cadiz.

COMPOUND ARBITRATION

Is a comparison between the exchanges of more than three places, in order to find how much a remittance passing through them all will amount to in the last place; or to find the arbitrated price between the first place and the last, in order to determine on the most advantageous mode of negotiating bills.

Compound arbitration is therefore a repetition of simple arbitration, and may be solved by a continuation of several statings in the Rule of Proportion, as in the following example:

Suppose the exchange between London and Amsterdam to be 35 Shillings Flemish for £1 sterling; between Amsterdam and Lisbon, 42 Pence Flemish for 1 Old Crusade, and between Lisbon and Paris, 480 Rees for 3 Francs, what is the arbitrated price between London and Paris?

First, As 35s. Flemish : £1 :: 42d. Flemish, or 3½s. Flemish : 2s. sterling = 1 Old Crusade.

Secondly, As 1 Old Crusade, or 400 Rees : 2s. sterling :: 480 Rees : 2s. 4⅘d. sterling = 3 Francs.

Thirdly, As 2s. 4⅘d. sterling : 3 Francs :: £1 sterling : 25 Francs.

Hence the arbitrated price is 25 Francs for £1 sterling.

But all such operations are best performed in the following manner by the Chain Rule:

		1 Pound sterling
1 Pound sterling	=	35 Shillings Flemish
3½ Shillings Flemish	=	1 Old Crusade
1 Old Crusade	=	400 Rees
480 Rees	=	3 Francs

Reduced = 25 Francs as above.

Suppose London has a sum of money to receive in Cadiz, the exchange being at 38d.; but, instead of drawing directly on this place, he draws on Amsterdam, ordering his agent there to draw on Paris; and Paris to draw on Cadiz; the exchange between London and Amsterdam being at 35 Shillings Flemish per Pound sterling; between Amsterdam and Paris 53½ Grotes Flemish per Ecu of 3 Francs; and between Paris and Cadiz, 15 Francs 50 Centimes per Doubloon of Plate; what is the arbitrated price between London and Cadiz?

		1 Dollar of Plate
4 Dollars of Plate	=	1 Doubloon do.
1 Doubloon	=	15½ Francs
3 Francs	=	53½ Grotes Flemish
12 Grotes	=	1 Shilling Flemish
35 Shillings Flemish	=	240 Pence sterling

Reduced, gives 39½d. sterling per Dollar of Plate.

The circular operation would, therefore, be most advantageous, as London would get 39½d. instead of 38d. for each Dollar, which he had to receive in Cadiz.

London having a sum to receive in Lisbon, when the exchange is at 64d. sterling per Milree, draws on Lisbon, but remits his bill to Hamburgh to be negotiated; and directs the returns to be made to him in bills on Leghorn—the exchange between Hamburgh and Lisbon being 45 Grotes Flemish per Old Crusade, between Hamburgh and Leghorn 85 Grotes Flemish per Pezza, and between London and Leghorn 52d. sterling per Pezza, what is the arbitrated price between London and Lisbon?

		1000 Rees
400 Rees	=	1 Old Crusade
1 Old Crusade	=	45 Grotes Flemish
85 Grotes	=	1 Pezza
1 Pezza	=	52 Pence sterling

Reduced, gives $68\frac{14}{17}$d. sterling per Milree.

This circular operation would, therefore, be more advantageous than the direct exchange of London on Lisbon, viz. $68\frac{14}{17}$d., instead of 64d.

London has a sum to pay in Petersburg, and another to receive in Genoa; but there being no regular exchange between these places, London draws on Hamburgh, and remits his bill to Petersburg, directing Hamburgh to draw on Genoa—the exchange between London and Genoa, being 46½d. sterling per Pezza; between Hamburgh and Genoa, 81 Grotes Flemish per Pezza; and between Petersburg and Hamburgh, 23 Schillings Lubs per Ruble; what is the exchange between London and Petersburg resulting from the operation—that is, how many Pence sterling does London pay for the Ruble?

		1 Ruble
1 Ruble	=	23 Schillings Lubs
1 Schilling Lubs	=	2 Grotes Flemish
81 Grotes	=	1 Pezza
1 Pezza	=	46½ Pence sterling

Reduced, = $26\frac{11}{17}$d. sterling per Ruble.

London has a sum to remit to Paris, the exchange being at 24 Livres 5 Sous per Pound sterling; but instead of taking a bill on Paris, London draws on Hamburgh, and remits his bill to Paris to be negotiated; Hamburgh is directed to draw on Venice, and Venice to draw on London; the exchange between Paris and Hamburgh being 190 Francs per 100 Marks Banco, between Hamburgh and Venice 4 Lire 5 Soldi Piccoli per Mark Banco, and between Venice and London 55 Lire Piccole per Pound sterling; what is the arbitrated price between London and Paris?

		1 Pound Sterling
1 Pound Sterling	=	55 Lire Piccole
4¼ Lire Piccole	=	1 Mark
100 Marks	=	190 Francs
80 Francs	=	81 Livres

Reduced, gives 24 Livres 18 Sous per Pound sterling.

The circular operation is, therefore, more advantageous than the direct exchange, as London pays 24 Livres 18 Sous, with £ 1 sterling, instead of 24 Livres 5 Sous.

Hitherto we have only examined one combination of the exchanges between several places in order to discover one result. In the following example we shall examine different combinations of the same exchanges, to find which is most favourable; and what is here performed with four places only, may be done with any greater number, in the same manner—that is, by trial and comparison.

Suppose the following to be the quotations of exchange:

London on	Amsterdam	35 Shillings Flemish per Pound sterling
	Madrid	38 Pence sterling per Dollar of Plate
	Paris	24 Livres per Pound sterling
Amsterdam on	London	34 Shillings Flemish per Pound sterling
	Paris	53 Grotes per Ecu of 3 Francs
	Madrid	92 Grotes per Ducat of Plate
Paris on	London	23½ Livres per Pound sterling
	Madrid	16 Francs per Doubloon of Plate
	Amsterdam	54 Grotes Flemish per Ecu of 3 Francs
Madrid on	London	39 Pence sterling per Dollar of Plate
	Amsterdam	94 Grotes per Ducat of Plate
	Paris	16½ Francs per Doubloon of Plate.

Now if London has a sum to receive in Madrid, what would be the most advantageous mode of operation?

By drawing directly on Madrid as above, London will receive 38d. sterling per Dollar.

First.—Let London draw on Amsterdam, directing Amsterdam to draw on Paris, and Madrid to remit to Paris; then the operation will be as follows:

		1 Dollar of Plate
4 Dollars	=	1 Doubloon of Plate
1 Doubloon	=	16½ Francs
3 Francs	=	54 Grotes Flemish
12 Grotes	=	1 Shilling Flemish
35 Shillings Flemish	=	240 Pence sterling

Reduced, gives the Dollar equal to $42\frac{3}{7}$d. sterling.

Secondly.—Let London draw on Paris, directing Paris to draw on Amsterdam, and Madrid to remit to Amsterdam; then,

		1 Dollar of Plate
1 Dollar of Plate	=	272 Maravedis
375 Maravedis	=	1 Ducat of Plate
1 Ducat	=	94 Grotes Flemish
53 Grotes	=	3 Francs
80 Francs	=	81 Livres
24 Livres	=	240 Pence sterling

Reduced, gives the Dollar = $39\frac{1}{11}$d.

Thirdly.—Let London draw on Madrid, and remit the bill to Paris to be negotiated, and let the returns be made in a bill on Amsterdam; then

		1 Dollar of Plate.
4 Dollars	=	1 Doubloon of Plate
1 Doubloon	=	16 Francs
3 Francs	=	54 Grotes Flemish
12 Grotes	=	1 Shilling Flemish
35 Shillings Flemish	=	240 Pence sterling.

Reduced, gives $41\frac{1}{7}$d. sterling per Dollar.

Fourthly.—Let London draw on Madrid, and remit to be negotiated in Amsterdam, and order the returns to be made in a bill on Paris; then

		1 Dollar of Plate
1 Dollar	=	272 Maravedis

375 Maravedis	=	1 Ducat of Plate
1 Ducat	=	92 Grotes Flemish
53 Grotes	=	3 Francs
80 Francs	=	81 Livres
24 Livres	=	240 Pence sterling.

Reduced, gives $38\frac{1}{4}$d. sterling per Dollar nearly.

Fifthly.—Let London draw on Amsterdam, Amsterdam on Paris, and Paris on Madrid; then

		1 Dollar of Plate
4 Dollars	=	1 Doubloon of Plate
1 Doubloon	=	16 Francs
3 Francs	=	53 Grotes Flemish
12 Grotes	=	1 Shilling Flemish
35 Shillings Flemish	=	240 Pence sterling.

Reduced, gives $40\frac{8}{21}$d. per Dollar.

Sixthly.—Let Madrid remit to Paris, Paris to Amsterdam, and Amsterdam to London; then

		1 Dollar of Plate
4 Dollars	=	1 Doubloon of Plate
1 Doubloon	=	$16\frac{1}{2}$ Francs
3 Francs	=	54 Grotes Flemish
12 Grotes	=	1 Shilling Flemish
34 Shillings Flemish	=	240 Pence sterling.

Reduced, gives 44d. per Dollar nearly.

Several other combinations might be made; but the foregoing are sufficient for the present illustration.

In recapitulating the different combinations here proposed, we find that

The First	gives	$42\frac{3}{7}$	Pence sterling	per	Dollar of Plate.
The Second	—	$39\frac{1}{11}$	—	—	per Ditto
The Third	—	$41\frac{1}{7}$	—	—	per Ditto
The Fourth	—	$38\frac{1}{4}$	—	—	per Ditto
The Fifth	—	$40\frac{8}{21}$	—	—	per Ditto
The Sixth	—	44	—	—	per Ditto
Whilst the direct course gives		38	—	—	per Ditto

Hence, it is evident, according to the rule laid down in pages 105 and 108, that the 6th operation would be most advantageous for the London drawer, as he would receive more

Pence for the Dollar than by any other combination; but it must be observed, that in this case, he would have to wait about six months for the remittance from Madrid through Paris and Amsterdam; whereas, by drawing directly on Madrid, he would receive the money immediately—consequently, interest should be deducted from the profit, besides commission, postage, &c. The Profit is, however, so great in this case, as far to exceed the additional expenses; thus—

As 38 : 44 :: 100 : $115\frac{3}{38}$. Profit, $15\frac{5}{6}$ per cent. nearly.

It is also evident, that if London was the debtor, and had to remit to Madrid, the lowest course of exchange, which is here the direct one, should be adopted.

CHARGES ON EXCHANGE OPERATIONS.

In the foregoing examples, no notice is taken of the expenses incident to exchange operations, such as commission, brokerage, interest, &c.; but it is necessary to make allowance for those charges, which is generally done by computing them at so much per cent.; *and then adding the per-centage if the money is to be paid, or subtracting it if to be received.* Suppose the charge to be 1 per cent.; if on a Draft it is 101 for 100, but if on a Remittance, 99 for 100.

Example I.—Suppose a merchant in Liverpool has 10,000 Marks to pay in Hamburgh, for which purpose he orders bills to be bought in London at 34s. 8d. besides which he is charged $\frac{1}{2}$ per cent. for commission and brokerage, how much sterling will he have to pay?

	s.	d. Flem.	£ ster.		Marks.		£	s.	d. ster.
As	34	8	: 1	::	10,000	:	769	4	$7\frac{1}{2}$

			£	s.	d. ster.		£	s.	d. ster.
And as 100	:	$100\frac{1}{2}$	:: 769	4	$7\frac{1}{2}$	:	773	1	$6\frac{1}{2}$

Example II.—A merchant in London negotiates a bill on Leghorn of 6592 Pezze 10 Soldi at $49\frac{1}{2}$d. sterling per Pezza; and pays as usual 1 per 1000 brokerage; how much sterling does he receive?

	Pezza		d. ster.		Pezze	Soldi		£	s.	d. ster.
As	1	:	$49\frac{1}{2}$	::	6592	10	:	1359	14	$0\frac{3}{4}$

			£	s.	d.		£	s.	d.
And as 1000	:	999	:: 1359	14	$0\frac{3}{4}$	:	1358	6	$10\frac{1}{2}$

When the operation is performed by the Chain Rule, the charges per cent. must be deducted

from 100 the last consequent, if it tends to the diminution of the result, but if to its increase, the same remainder must be an antecedent.

Example III.—London, having a sum to pay in Lisbon, buys bills on Hamburgh at the exchange of 35s. 4d. and remits them to Lisbon, where they are negotiated at 43 Grotes Flemish per Old Crusade. The charges in Lisbon for brokerage, commission, and postage are $\frac{3}{4}$ per cent; what is the arbitrated price between London and Lisbon, resulting from the operation—that is how many Pence sterling should be given for the Milree?

		1000 Rees
400 Rees	=	43 Grotes Flemish
424 Grotes	=	240 Pence sterling
100 Pence	=	$100\frac{3}{4}$ Pence, adding charges.

Answer, $61\frac{3}{10}$d. sterling per Milree.

In the above question the charges are added to the last consequent as they increase the price of the Milree, which must be the case, the charges being against the Payee.

Example IV.—London takes bills on Madrid at $33\frac{1}{2}$d. per Dollar of exchange, remits them to Amsterdam with orders to negotiate at $90\frac{1}{4}$ Grotes Flemish per Ducat of exchange, and to make the returns in bills on Paris at $51\frac{3}{8}$ Grotes per Ecu of 3 Francs: these bills on Paris are negotiated in London at 25 Livres 18 Sous per Pound sterling; and all the charges (including interest) amount to $1\frac{1}{8}$ per cent.; how much per cent. is gained or lost by this operation—that is, how much will 100d. sterling produce?

		100 Pence Sterling
$33\frac{1}{2}$ Pence	=	272 Maravedis or 1 Dollar of exchange
1 Ducat of exchange, or 375 Maravedis	=	$90\frac{1}{4}$ Grotes
$51\frac{3}{8}$ Grotes	=	3 Francs
80 Francs	=	81 Livres
1 Livre	=	20 Sous
518 Sous	=	240 Pence
100 Pence	=	$98\frac{7}{8}$ Pence deducting charges.

The result is 105,85d. The profit is, therefore, 5,85 or nearly $5\frac{7}{8}$ per cent.

In the last example, the interest was to be deducted from the profits, but an example will now be given, in which the interest is to be added, because the drawer gains it; and, in such case, it is to be added to the antecedent instead of being subtracted.

Example V.—London draws bills on Hamburgh at 34 Shillings Flemish per Pound sterling, and orders Hamburgh to draw for his reimbursement on Leghorn, which is done at 86 Grotes Flemish per Pezza; Leghorn draws in the same way on Cadiz at 140 Dollars of

Plate per 100 Pezze; and lastly, Cadiz draws on London at 39 Pence sterling per Dollar; what is the profit or loss on the operation, supposing that the charges in each of the above three foreign places are $\frac{3}{4}$ per cent. (in all $2\frac{1}{4}$ per cent.); but that London, by keeping the money in his hands about 8 months, gains 3 per cent. by the interest?

		100 Pence sterling
240 Pence	=	34 Shillings Flemish
1 Shilling Flemish	=	12 Grotes
86 Grotes	=	1 Pezza
100 Pezze	=	140 Dollars of Plate
1 Dollar of Plate	=	39 Pence
$97\frac{3}{4}$ Pence deducting charges	=	100 Pence
103 Pence with interest	=	100 Pence

The Answer is 107,2d. The loss is, therefore, $7\frac{1}{5}$ per cent. nearly.

As the above example comprehends all the varieties that generally occur in questions of this kind, it is here solved by a series of statings in the Rule of Three, which serves at once to explain the nature of the operation, and to prove the correctness of the Chain Rule. Such illustrations must be highly useful in all problems of arbitration.

London, we will suppose, receives 100 Pence, or any other denomination, by drawing on Hamburgh at 34s. Flemish per Pound sterling.

	d.		s.		d.	Grotes Flem.
As	240	:	34	::	100	: 170

Hamburgh must, therefore, draw on Leghorn for that sum,—thus

	Grotes		Pezza		Grotes		Pezza
As	86	:	1	::	170	:	1,977

Leghorn in the same way reimburses on Cadiz.

	Pezze		Doll. Plate		Pezza		Doll. Plate
As	100	:	140	::	1,977	:	276,78

For which Cadiz thus finally draws on London—

	Doll.		d.		Doll.		d.	
As	1	:	39	::	276,78	:	107,94	which the drawer must pay.

Then to add the expense to the loss, say

	d.		d.		d.		d.
As	97,75	:	100	::	107,94	:	110,42

And to deduct the interest from the loss, say

	d.		d.		d.		d.
As	103	:	100	::	110,42	:	107,2

If, in the above statement, the drawer or seller had been the buyer or remitter, then the expenses and interest must have been reversed as to their places, both in the Chain Rule and in the Rule of Three.

LOGARITHMS IN EXCHANGE.

Operations in exchange may be sometimes greatly facilitated by the help of Logarithms. Thus, in a statement of arbitration—*if the sum of the Logarithms of the Antecedents, be subtracted from the sum of the Logarithms of the Consequents, the remainder will be the Logarithm of the Answer.*

To apply this rule to Example IV. page 127, let like numbers on both sides be struck out as before; to reduce them to a lower denomination is useless, as the Logarithm of a large number is as easily found as that of a small one: thus—

Antecedents.	Logarithms.	Consequents.	Logarithms.
33,5	1,525045	272	2,434569
125	2,096910	90,25	1,955447
51,375	1,710752	3	0,477121
518	2,714330	81	1,908484
		20	1,301030
	8,047037	98,875	1,995086
		Sum of Log. of Con.	10,071737
		Sum of Log. of Ant.	8,047037
		Answer, 105,85 =	2,024700

The reason of the above operation will be understood by considering that Multiplication and Division of common numbers are performed by Addition and Subtraction of their Logarithms. Laborious calculations, therefore, must be greatly facilitated by the help of Logarithms, and their application in Exchange seems too obvious to require any further illustration.

FIXED NUMBERS IN EXCHANGE.

In every long statement of an exchange operation, there are both fixed numbers and variable numbers: the latter are generally the prices of exchange, and the fluctuating agios, or values of different sorts of money, with the amount of charges, &c.; and the former, that is, the fixed numbers, are the permanent proportions between certain denominations of money, as the number of Pence in a Pound sterling, &c. Now when opera-

tions between the same places are to be repeated several times, and at such intervals, as to admit of alterations in the variable numbers, the work may be considerably abridged by reducing all the invariable terms into a fixed number, which may be afterwards used as a constant factor in all such questions.

Thus, in Example III., page 127, among the Antecedents, 400 expressing the number of Rees in an Old Crusade, and 100, which is assumed, in order to find a per centage on the operation, are fixed numbers; and, among the Consequents, 1000, the number of Rees in a Milree, and 240, the number of Pence in a Pound sterling, are likewise fixed numbers. The variable numbers are the exchanges between London and Hamburgh, and between Hamburgh and Lisbon, and the amount of the charges. Then let the fixed numbers be cast up, thus—

400	1000
100	240

By expunging the cyphers, and dividing both sides by 4, the result, or *fixed number*, will be 6 in all questions of the same kind. Then multiply the constant number 6 by the course of exchange of Hamburgh on Lisbon, and by 100 more the charges, and divide by the course of exchange of London on Hamburgh expressed in Grotes Flemish: or, by Logarithms,—to the constant Logarithm of 6, add the Logarithms of the two first-mentioned variable quantities, and subtract the Logarithm of the last: thus—

Logarithm of	6	0,778151
	43	1,633468
	100,75	2,003245
		4,414864
Logarithm of	424	2,627366
		1,787498 Log. of 61,3 the arbitrated price,

(found page 127.*)*

Now let the exchange of London on Hamburgh be at 34s. 8d. (or 416 Grotes per Pound sterling, and that of Hamburgh on Lisbon at 44 Grotes per Crusade; let also the charges amount to $\frac{1}{2}$ per cent.

Fixed Logarithm		0,778151
Logarithm of	44	1,643453
	100,5	2,002166
		4,423770
Logarithm of	416	2,619093
		1,804677 Log. of 63,78, or 63$\frac{3}{4}$ nearly.

In Example IV. page 127, on one side 375 and 80; and on the other side 272, 3,81, 240 are invariable numbers (besides 100 which may be cancelled on both sides), which may be reduced as before to 125.....272 / 3 / 81 / 20 give $\frac{1321920}{125}$ = 10575,4 Fixed Number.

The fixed Logarithm is then found as follows:

Logarithm of 272.....	2,434569
3.....	0,477121
81.....	1,908484
20.....	1,301030
	6,121204
Logarithm of 125.....	2,096910
Fixed Logarithm	4,024294 = 10575,4 Fixed Number.

This may be applied to the questions, page 127, as follows:

Antecedents.	Logarithms.	Consequents.	Logarithms.
33,5	1,525045	90,25	1,955447
51,375	1,710754	98,875.....	1,995086
518, ...	2,714330	Fixed Logarithm	4,024294
	5,950127	Sum of Log. of Con.	7,974827
		Sum of Log. of An.	5,950127
		Answer, Log. 105,85	2,024700 as before.

ARBITRATION OF SPECIE AND BULLION.

The state of the exchange between two countries is sometimes such, that it is found more advantageous, instead of drawing or remitting bills, to import or export specie or bullion. The profit or loss on operations of this kind may be determined by calculations similar to those used in arbitration of exchange.

By this rule also the course of exchange is determined from the price of bullion, and *vice versa*.

Example I.—London has a sum to receive in Lisbon, the exchange being at 62; but instead of drawing on Lisbon, he orders a quantity of Johaneses to be bought there, the discount on paper money in Portugal being at the time 12 per cent.; these Johaneses are sold in London at £4 sterling per ounce; the charges, namely, commission, freight, and insurance, amount to $2\frac{1}{2}$ per cent.;—what is the exchange between London and Lisbon resulting from the operation; that is, how many Pence sterling should be given for the Milree, legal money?

		1000	Rees
100	Rees legal money	=	94 Rees effective
6400	Rees effective	=	1 Johanese
1	Johanese	=	$220\frac{1}{2}$ Grains
480	Grains in Johanese	=	4 Pounds sterling
1	Pound	=	240 Pence sterling
100	Pence	=	$97\frac{1}{2}$ Pence deducting charges.

Reduced, gives 63,15d. per Milree.

The circular operation would therefore be most advantageous to the London Drawer.

Example II.—A quantity of Dollars is imported from Cadiz, for which bills are drawn on London at the exchange of $38\frac{3}{4}$, and the charges amount to 3 per cent.;—how much per ounce will these Dollars cost in London, supposing 1000 Dollars to weigh 866 Ounces Troy?

		1	Ounce of Dollars
866	Ounces	=	1000 Dollars
1	Dollar	=	$10\frac{5}{8}$ Reals of Plate
8	Reals of Plate	=	1 Dollar of Exchange
1	Dollar of Exchange	=	$38\frac{3}{4}$ Pence sterling
100	Pence	=	103 Pence with charges.

Reduced, gives 61,21d. or 61¼d. per Ounce nearly.

Example III.—London has a sum to pay in Hamburgh, the exchange being at 34; but instead of remitting bills, he buys a quantity of Spanish Dollars at $60\frac{1}{2}$d. sterling per Ounce, which are sent to Hamburgh, and there sold at 28 Marks Banco per Mark fine; the charges amount to $1\frac{1}{2}$ per cent.;—what is the arbitrated price, or course of exchange, between London and Hamburgh, the Dollars being 10 oz. 15 dwts. fine, and 60 Marks in Hamburgh being equal to 451 Ounces Troy?

		1 Pound Sterling
1 Pound Sterling	=	240 Pence
60½ Pence	=	1 Ounce in Dollars
120 Ounces in Dollars	=	107 Ounces fine
451 Ounces	=	60 Marks Hamburgh weight
1 Mark fine	=	28 Marks Banco
3 Marks Banco	=	8 Shillings Flemish banco
100 Shillings Flemish	=	98½ Shillings deducting charges.

Answer, 34s. 7¼d. Flemish per Pound Sterling.

The operation would therefore be preferable to the course of exchange; for, with £1 sterling, London here pays 34s. 7¼d. Flemish, whereas, by remitting bills to Hamburgh, with £1 sterling, he would have paid only 34 Shillings Flemish.

Example IV.—Gold in bars is bought in Hamburgh at 98 Shillings Lubs per Ducat of gold (67 of which Ducats make a Cologne Mark, 23½ carats fine); this gold is conveyed to England, and Hamburgh draws on London for the value at 34s. 6d. Flemish per Pound sterling; the charges amount to 1¼ per cent.;—how much does this gold cost in London per Ounce standard?

		1 Ounce Standard
47 Ounces Standard	=	44 Ounces, 23½ carats fine
451 Ounces	=	60 Cologne Marks
1 Cologne Mark	=	67 Ducats
1 Ducat	=	98 Shillings Lubs
6 Shillings Lubs	=	1 Shilling Flemish
34½ Shillings Flemish	=	1 Pound Sterling
100 Pounds	=	101¼ Pounds with charges.

Answer, £4 sterling per Ounce, very nearly.

Example V.—Silver in bars is bought at Cadiz at 105 Reals of Plate per Spanish Mark of fine silver; this silver is sent to England, and sold at 5s. 4d. sterling per Ounce of standard silver; the charges amount to 2 per cent.;—what is the arbitrated price between London and Cadiz, reckoning that 12 Spanish Marks equal 89 Ounces Troy, or what should be the course of exchange resulting from this operation?

		1 Dollar of Plate
1 Dollar of Plate	=	8 Reals of Plate
105 Reals of Plate	=	1 Mark of fine silver.
222 Marks Fine	=	240 Marks standard silver
12 Marks	=	89 Ounces Troy
1 Ounce Standard	=	64 Pence sterling
100 Pence	=	102 Pence with charges.

Answer, 39¾d. per Dollar of exchange, nearly.

Example VI.—Gold in bars is bought in Lisbon at 1700 Recs legal money per Outava of Gold, 22 carats fine; this gold is sold in London at £4 per Ounce; the charges amount to 1½ per cent.;—what is the arbitrated price between London and Lisbon, reckoning that 400 Ounces of Portugal equal 369 Ounces Troy; that is, what should be the course of Exchange resulting from this operation?

			1000 Rees
1700	Rees	=	1 Outava of Standard Gold
8	Outavas	=	1 Ounce of Portugal
400	Ounces of Portugal	=	369 Ounces Troy
1	Ounce Troy	=	4 Pounds Sterling
1	Pound Sterling	=	240 Pence
100	Pence	=	101½ Pence with charges

Answer, 66d. $\frac{2}{100}$ per Milree.

ARBITRATION OF MERCHANDIZE.

Arbitration of merchandize consists chiefly in determining, when the price of any kind of goods in one place is known, what it would come to in another place; and consequently, the price at which it should be sold in order to obtain a certain profit. In most cases, there are various charges and expenses to be taken into account, which are commonly reckoned at so much per cent.; or sometimes a certain proportion is deducted from the weight or the measure. Strict accuracy is not in general required in such calculations, but only such an estimate as will enable the merchant to judge how he may, with the greatest advantage, export or import any particular kind of goods.

Example I.—Suppose a certain kind of woollen cloth to cost in London 16½s. per yard; the exchange of London on Hamburgh being 34s. 2½d. Flemish Banco per Pound Sterling; and the agio on the Bank 21½ per cent.;—what will this cloth come to in Hamburgh currency per Brabant Ell, 49 of which equal 37 English yards?

			1 Brabant Ell
49	Brabant Ells	=	37 English yards
1	Yard	=	16½ Shillings Sterling
20	Shillings Sterling	=	410½ Grotes Flemish Banco
32	Grotes Flemish	=	1 Mark
100	Marks Banco	=	121½ Marks currency

Answer, 9 Marks 11 Shillings 4 Pfenings currency per Ell.

Example II.—Suppose the cwt. of coffee in London to cost 65 Shillings on board, and the exchange on Hamburgh to be 34s. 8d.; commission 2 per cent.; and insurance 1 per cent.;—what will the lb. of such coffee come to in Hamburgh Banco, reckoning for freight, brokerage, and other charges $4\frac{1}{2}$ Pfenings Banco per Pound,—112lb. avoirdupois being equal to 105lb. of Hamburgh?

		1 lb. of Hamburgh
105 lb. of Hamburgh	=	1 Hundred Weight Avoirdupois
1 Hundred Weight	=	65 Shillings Sterling
20 Shillings Sterling	=	416 Grotes Flemish Banco
2 Grotes Flemish	=	1 Schilling Lubs
100 Schillings	=	102 Schillings with Commission
100 Schillings	=	101 Schillings with Insurance

Answer, 6 Schillings $7\frac{1}{2}$ Pfenings Banco nearly.
Add..... $4\frac{1}{2}$ Pfenings for Charges in Hamburgh

Ans. 7 Schillings per lb.

Example III.—Irish butter sells at Cork for 50 Shillings Irish per cwt. the exchange of Cork on London is $9\frac{1}{4}$; and that of London on Hamburgh 35;—what price will the cask of 224 lb. come to in Hamburgh currency, reckoning commission and insurance together at $3\frac{1}{2}$ per cent., the charges in Hamburgh at 5 Marks current per cask, and the agio on the Bank 22 per cent?

		224 lb. of Hambnrgh
105 lb. of Hamburgh	=	1 Hundred Weight Avoirdupois
1 Hundred Weight	=	50 Shillings Irish
$109\frac{1}{4}$ Shillings Irish	=	100 Shillings Sterling
20 Shillings Sterling	=	35 Shillings Flemish Banco.
8 Shillings Flemish	=	3 Marks
100 Marks Banco	=	122 Marks current
100 Marks current	=	$103\frac{1}{2}$ Marks current with Comn. and Inse.

Answer, 80 Marks $14\frac{1}{2}$ Schillings current nearly.
Charges in Hamburgh.... 5 Marks

85 Marks $14\frac{1}{2}$ Schillings per Cask.

Example IV.—Pepper is bought in London at $11\frac{1}{2}$d. per lb. net weight, which, with the allowances for draft and tare, comes to $10\frac{3}{4}$d. per lb. gross weight. This pepper is exported to Amsterdam, the exchange being at 36 Shillings Flemish Banco per Pound Sterling; $1\frac{2}{3}$ per cent. is allowed for tare in Amsterdam: freight, insurance, and other charges

amount to $6\frac{1}{2}$ per cent. and it is sold there at 28 Grotes Flemish per Pound; but 2 per cent. is allowed for Rabat on the price;—what is the profit or loss on the operation,—56 lb. of Amsterdam being equal to 61 lb. avoirdupois?

		1 lb. Avoirdupois
61 lb. Avoirdupois	=	56 lb. of Amsterdam
$101\frac{3}{4}$ lb. Gross Weight	=	100 lb. Net Weight in Amsterdam
1 lb. Net Weight	=	28 Grotes Flemish
102 Grotes	=	100 Grotes, with Rabat
$106\frac{1}{2}$ Grotes	=	100 Grotes, with Charges
12 Grotes	=	1 Shilling Flemish
36 Shillings Flemish	=	240 Pence Sterling

	s.	d.	
Reduced, gives....	12	9	sterling per lb.
Prime Cost	11	5	
Profit	1	4	per lb. or $12\frac{4}{23}$ per cent.

Example V.—The Last of wheat at Dantzic costs 620 Florins, and it is computed that it might be sold in London at 90 Shillings per Quarter; Dantzic may draw on Hamburgh for the amount at 166 Groschen per Rixdollar Banco, and the exchange of Hamburgh on London is 34s. 6d.;—what would be the profit or loss on the importation of such wheat, reckoning that the Last of Dantzic equals $10\frac{3}{4}$ English Quarters, that the charges at Dantzic will amount to $12\frac{1}{2}$ per cent., and that the freight, insurance, and all the charges to be paid in London (including commission to the Hamburgh correspondent) will amount to 20 per cent.?

		1 English Quarter
$10\frac{3}{4}$ Quarters	=	1 Last in Dantzic
1 Last in Dantzic	=	620 Florins
100 Florins	=	$112\frac{1}{2}$ Florins, with charges in Dantzic
1 Florin	=	30 Groschen
166 Groschen	=	1 Rixdollar Hamburgh Banco
1 Rixdollar	=	8 Shillings Flemish
$34\frac{1}{2}$ Shillings Flemish	=	1 Pound Sterling
100 Pounds	=	120 Pounds, with Charges
1 Pound	=	20 Shillings

Reduced, gives $65\frac{1}{4}$ Shillings per Quarter.

If therefore the wheat can be sold at 90s. the profit will be $24\frac{3}{4}$s. per Quarter, or about 38 per cent.

The following question will show how to determine between two or more places, in order to find which will give the most advantageous result.

Example VI.—A quantity of Spanish wool has been bought at Bilboa at 325 Reals Vellon per Arroba of 25 lb. with an intention to export it either to London or to Amsterdam; the price of such wool in London is found to be 4 Shillings per lb. allowing 6 months credit; and in Amsterdam 58 Stivers per lb. allowing 21 months rabat, *i. e.* 14 per cent. and 1 per cent. for prompt payment: the exchange of Bilboa on London is 37d. per Dollar, and on Amsterdam 87 Grotes Flemish per Ducat;—which of the two places is the most advantageous to export to?

By a reference to the first volume, it will be found that 100 lb. of Bilboa are equal to 108 lb. avoirdupois, which answer to $99\frac{1}{6}$ lb. of Amsterdam: and that the allowances on Spanish wool in London are 22 lb. per bale of 2 cwt. And suppose the allowances in Amsterdam amount to 20 per cent.

And, to simplify the question, we will suppose the charges to be the same in London as in Amsterdam, so that they need not be taken into account.

Beginning with London, say

		1 lb. Avoirdupois.
202 lb.	Net Weight	= 224 lb. Gross Weight.
108 lb.	Avoirdupois	= 100 lb. of Bilboa.
25 lb.	of Bilboa	= 325 Reals Vellon.
32	Reals Vellon	= 17 Reals of Plate.
8	Reals of Plate	= 1 Dollar of Exchange.
1	Dollar of Exchange	= 37 Pence Sterling.

Reduced, gives 2s. $8\frac{3}{4}$d. sterling per lb.

This wool will therefore come to 2s. $8\frac{3}{4}$d. per lb. in London, where it is sold at 4s. per lb. from which, however, six months discount must be deducted; then

As 100 : $97\frac{1}{2}$: : 4s. : 3s. $10\frac{3}{4}$d. the real price.
And as 2s. $8\frac{3}{4}$d. : 3s. $10\frac{3}{4}$d. : : 100 : $142\frac{98}{131}$d.

The profit on the operation to London is therefore $42\frac{98}{131}$d. or nearly $42\frac{2}{3}$ per cent.

Then for Amsterdam, say

		1 lb. of Amsterdam.
100 lb.	Net Weight	= 120 lb. Gross Weight.
$99\frac{1}{6}$ lb.	of Amsterdam	= 100 lb. of Bilboa.
25 lb.	of Bilboa	= 325 Reals Vellon.
1	Real	= 34 Maravedis.

32 Maravedis Vellon	=	17 Maravedis of Plate.
375 Maravedis of Plate	=	1 Ducat of Exchange.
1 Ducat of Exchange	=	87 Grotes Flemish.
2 Grotes Flemish	=	1 Stiver.

Reduced, gives 32,96 Stivers per lb.

This wool will, therefore, come to 32,96 Stivers per lb. in Amsterdam, where it is sold at 58 Stivers per lb.; but from this 15 per cent. must be deducted for Rabat and prompt payment; then

As 100 : 85 : : 58 Stivers : 49,3 Stivers, the real price.

And as 32,96 : 49,30 : : 100 : $149\frac{2}{4}\frac{3}{1}\frac{7}{2}$.

The profit on the operation to Amsterdam is $49\frac{2}{4}\frac{3}{1}\frac{7}{2}$, which is 7 per cent. more than in London; and, therefore, supposing, as we have done, that the freight, insurance, duty on importation, and other charges would amount to the same sum in both places, Amsterdam must be a more advantageous place to export to than London.

By the foregoing examples may be seen the great advantages which merchants may derive from a knowledge of arbitration, whether of merchandize, bullion, or exchanges; and the following article will likewise show the utility and importance of this science when judiciously applied, on a large scale, to national or political purposes.

EXCHANGE CIRCULATIONS.

Exchange Circulations are a kind of arbitration, in which a merchant negotiates his bills on his correspondent in a foreign place, directing him to draw on a third person for his reimbursement; and further ordering the operation to be continued on the same plan from one place to another, until the last correspondent reimburses himself by drawing on the original negotiator or drawer.

Thus, circular exchange is carried on among several persons on the same principle as drawing and redrawing between two correspondents; that is, when one draws upon the other directing the correspondent to draw on him again for his reimbursement, and each sells his draft for ready money.

Operations in circular exchange afford not only immediate resources, but also con-

siderable profits when judiciously managed. In order, however, to carry on this kind of business with proper effect, it is necessary for the original drawer to establish a proper credit in every place where the bills are to be negotiated; and to be provided likewise with funds to make good, in the end, all his engagements.

Exchange Circulations may be distinguished under two heads:

1st. Operations by which individuals or houses possessed of limited capitals may undertake large negotiations, and thus make their credit supply both immediate funds and future profit.

2dly. Operations to which governments and public establishments have occasional recourse, either to remit subsidies, or to effect a rise or fall in exchanges.

The first kind of circulation has been already explained in compound arbitration; and it is particularly illustrated in Example V. page 127.

The second kind of circulation is carried on precisely on the same principle as the first; but as this is a subject of considerable importance in political economy, as well as commercial speculation, we shall here further illustrate it by a real example.

In 1804 Spain was bound to pay to France a large Subsidy; and, in order to do this, three direct methods presented themselves:—

1. To send Dollars to Paris by land.
2. To remit Bills of Exchange directly to Paris.
3. To authorise Paris to draw directly on Spain.

The first of these methods was tried, but it was found too slow and expensive; and the second and third plans were considered as likely to turn the exchange against Spain. The following method by circular exchange was, therefore, adopted:—

A Merchant, or Banquier, at Paris, was appointed to manage the operation, which he thus conducted: he chose London, Amsterdam, Hamburgh, Cadiz, Madrid, and Paris, as the principal hinges on which the operation was to turn, and he engaged correspondents in each of those cities to support the circulation. Madrid and Cadiz were the places in Spain from whence remittances were to be made, and Dollars were, of course, to be sent where they bore the highest price, for which Bills were to be procured on Paris, or on any other places that might be deemed more advantageous.

The principle having been thus established, it only remained to regulate the extent of the operation so as not to issue too much paper on Spain, and to give the circulation as much support as possible from real business. With this view, London was chosen as a place to which the operation might be chiefly directed, as the price of Dollars was then high in England, a circumstance which rendered the proportional exchange advantageous to Spain. The business was commenced at Paris, where the negotiation of drafts issued on Hamburgh and Amsterdam served to answer the immediate demands of the State; and orders

were transmitted to those places to draw for their reimbursements on London, Madrid, or Cadiz, according as the courses of exchange were most favourable. The proceedings were all conducted with judgment and attended with considerable success.

At the commencement of the operation the course of exchange of Cadiz on London was 36d. but by the plan adopted, Spain obtained 39¼d. as may be seen by the following computation :—

The several charges of the consignments of Dollars from Cadiz to London amounted to 11 per cent. and they were sold at 5s. 7d. per oz.—Hence,

		1 Dollar of Exchange.
85 Dollars of Exchange	=	64 Hard Dollars.
1000 Hard Dollars	=	866 Ounces (by common estimate).
1 Ounce	=	67 Pence.
111 Pence	=	100 Pence with charges.

Reduced, gives the exchange 39¼d.

Thus Spain, instead of getting 36d. for the Dollar of Exchange, received 39¼d. and, therefore, gained above 8 per cent. by the remittance of Dollars to London, and considerable advantages were likewise made by the circulation of Bills through the several places on the Continent. Time was also gained for the payment of the subsidy; and the course of Exchange, instead of being turned against Spain, as it must have been by direct remittances, was rather turned in her favour by this circular method of operation.

PAR OF EXCHANGE.

As the Par of Exchange has been already explained under various views, (p. 13,) it remains here to show how the intrinsic Par is computed; which is exemplified between London and the principal trading places of Europe by comparing gold with gold, and silver with silver, which may be done either from the Mint Regulations of each place, or from Assays such as are contained in the Tables of Gold and Silver Coins in this Volume.

In computing the Par of Exchange by the Chain Rule the *certain money* should be the leading term, or first consequent, and the *uncertain money* the term of demand, or last consequent, as in the following examples.

LONDON AND AMSTERDAM.

Required the Par of Exchange between London and Amsterdam resulting from the new 10 Florin Piece, weighing 6,729 Grammes $\frac{9}{10}$ fine, and the British Sovereign, or 20 Shilling Piece? Here the latter is the *certain* and the former the *uncertain* money.

		1 Pound Sterling.
1 Pound Sterling	=	240 Pence.
934½ Pence	=	1 Ounce Standard.
12 Ounces Standard	=	11 Ounces fine Gold.
1 Ounce	=	480 Grains.
15434 Grains	=	1000 Grammes.
6,729 Grammes × $\frac{9}{10}$	=	10 Florins.

Result, 12 Florins 9 Cents. for £1 Sterling, or 40 Shillings 3 Pence Flemish.

The Par of Exchange may be found with less labour than by the above method from Tables of Coins. Thus, in the following Table of Gold Coins it will be seen that the 10 Florin Piece contains 93,46 Grains, and the Sovereign 113 Grains of fine Gold:—then say,

	Gr.		Fl.		Gr.		Fr.	Cent.	
As	93,46	:	1	: :	113	:	12	09	as above.

LONDON AND AMSTERDAM.—Silver.

Required the Par of Exchange between London and Amsterdam, resulting from a comparison of the new Silver Florin and the Pound Sterling?

By a reference to the Table of Coins it will be seen that the Florin contains 148,38 Grains of fine Silver, and the Pound 1718,7 Grains;—hence,

	Gr.		Fl.		Gr.		Fl.
As	148,38	:	1	: :	1718,7	:	11,58

Thus the Par in silver is 11 Florins 58 Cents. for the Pound Sterling, which differs about 4½ per cent. from the gold Par:—they might, however, be made to agree by valuing the English silver at 5s. 3½d. per ounce, instead of 5s. 2d.

LONDON AND HAMBURGH.—Gold.

Required the Par of Exchange resulting from a comparison of the Hamburgh Ducat containing 53 English Grains of pure Gold, and the Sovereign containing 113 Grains, supposing that the Ducat equals 6 Marks Banco, or 16 Shillings Flemish.

	Gr.		Sh.		Gr.		Sh.	d.
As	53	:	16	: :	113	:	34	1,35

Thus the gold Par is 34 Shillings 1,35 Pence Flemish per £1 Sterling; but, from the fluctuating value of the Ducat, the Par cannot be considered permanent: by taking the average price of the Ducat for the last four years, which is $6\frac{1}{4}$ Marks, the Par would be 35 Shillings 6 Pence Flemish per Pound Sterling.

LONDON AND HAMBURGH.—Silver.

The Cologne Mark of fine Silver is generally worth $27\frac{5}{8}$ Marks Banco, and 60 Marks Cologne weight are equal to 451 ounces Troy;—what is the Par between London and Hamburgh Banco in Silver?

			1 Pound Sterling.
1	Pound Sterling	=	240 Pence.
62	Pence	=	1 Ounce Standard.
40	Ounces Standard	=	37 Ounces fine Silver.
451	Ounces	=	60 Cologne Marks.
1	Cologne Mark fine	=	$27\frac{5}{8}$ Marks Banco.
3	Marks Banco	=	8 Shillings Flemish Banco.

Reduced, gives 35s. 1d. Flemish Banco, per £ sterling.

But on account of the fluctuations in the prices of the Ducat and of the Mark of fine silver, no permanent Par can be determined between London and Hamburgh.

LONDON AND PARIS.—Gold.

Required the Par of Exchange between London and Paris, resulting from the Mint Regulations, as stated under the articles France and London, vol. i.

			1 Pound Sterling.
1	Pound Sterling	=	240 Pence.
62	Pence	=	1 Ounce Standard.
40	Ounces Standard	=	37 Ounces fine Silver.
1	Ounce	=	480 Grains.
15434	Grains	=	1 Kilogramme.
1	Kilogramme	=	3444 Francs 44 Cen. 444.

Reduced, gives the Pound Sterling equal to 25 Francs 22 Centimes.

The Par deduced from the Table of Assays is 4 Centimes more than the above:—

	Gr.		Fr.		Gr.		Fr.	Cen.
For as	89,5	:	20	: :	113	:	25	26

See Table of Gold Coins.

LONDON AND PARIS.—Silver.

Required the Par of Exchange between England and France, resulting from the Mint Regulations.

			1 Pound Sterling.
1	Pound Sterling	=	240 Pence.
62	Pence	=	1 Ounce Standard.
40	Ounces Standard	=	37 Ounces fine.
1	Ounce fine	=	480 Grains.
15434	Grains	=	1 Kilogramme.
1	Kilogramme	=	222 Francs 222 Cen. 222.

Reduced, gives the Pound Sterling equal to 24 Francs 73 Centimes.

If English Silver be valued at $63\frac{1}{8}$ the Pars of both metals will be alike.

The Par in Silver from the Table of Assays is 24,91.

LONDON AND GENOA.—Gold.

The new gold Genovina contains 357,7 English grains of fine gold, and it passes for 96 Lire fuori Banco;—what is the Par between London and Genoa in gold?

			1 Pezza.
1	Pezza	=	$5\frac{3}{4}$ Lire.
96	Lire	=	1 Genovina.
1	Genovina	=	357,7 Grains of fine Gold.
480	Grains	=	1 Ounce.
11	Ounces fine Gold	=	12 Ounces Standard.
1	Ounce Standard	=	$934\frac{1}{2}$ Pence Sterling.

Reduced, gives $45\frac{1}{2}$d. Sterling per Pezza.

LONDON AND GENOA.—Silver.

The silver Scudo contains $457\frac{1}{2}$ English grains of fine silver, and it passes for 8 Lire fuori Banco;—what is the Par between London and Genoa in silver?

			1 Pezza.
1	Pezza	=	$5\frac{3}{4}$ Lire.
8	Lire	=	$457\frac{1}{2}$ Grains of fine Silver.
480	Grains	=	1 Ounce.
37	Ounces fine Silver	=	40 Ounces Standard.
1	Ounce	=	62 Pence Sterling.

Reduced, gives 45,92d. Sterling per Pezza.

LONDON AND LEGHORN.—Gold.

The Sequin contains 53,6 English grains of fine gold, and it passes for 13$\frac{1}{3}$ Lire Moneta Buona;—what is the Par between London and Leghorn in gold?

		1 Pezza.
1 Pezza	=	5$\frac{3}{4}$ Lire Moneta Buona.
13$\frac{1}{3}$ Lire Moneta Buona	=	1 Sequin.
1 Sequin	=	53,6 Grains of fine Gold.
480 Grains	=	1 Ounce.
11 Ounces fine Gold	=	12 Ounces Standard.
1 Ounce Standard	=	934$\frac{1}{2}$ Pence Sterling.

Reduced, gives 49,09d. Sterling per Pezza.

LONDON AND LEGHORN.—Silver.

The Silver Scudo, or Leopoldone, contains 384 English grains of fine silver, and it passes for 6$\frac{1}{3}$ Lire Moneta Buona;—what is the Par between London and Leghorn in silver?

		1 Pezza.
1 Pezza	=	5$\frac{3}{4}$ Lire Moneta Buona.
6$\frac{1}{3}$ Lire Moneta Buona	=	1 Scudo.
1 Scudo	=	384 Grains of fine Silver.
480 Grains	=	1 Ounce.
37 Ounces fine Silver	=	40 Ounces Standard.
1 Ounce Standard	=	62 Pence Sterling.

Reduced, gives 46$\frac{1}{4}$d. Sterling per Pezza.

LONDON AND SPAIN.—Gold.

The Quadruple of 1772 contains 372 English grains of fine gold, and it passes for 320 Reals Vellon;—what is the Par between London and Spain in gold?

		1 Dollar of Plate.
1 Dollar of Plate	=	8 Reals of Plate.
17 Reals of Plate	=	32 Reals Vellon.
320 Reals Vellon	=	1 Quadruple.
1 Quadruple	=	372 Grains of fine Gold.
480 Grains	=	1 Ounce.
11 Ounces fine Gold	=	12 Ounces Standard.
1 Ounce Standard	=	934$\frac{1}{2}$ Pence Sterling.

Reduced, gives 37,16d. sterling per Dollar of Plate.

LONDON AND SPAIN.—Silver.

The Dollar contains 371 English grains of fine silver, and it passes for 20 Reals Vellon; —what is the Par between London and Spain in silver?

		1 Dollar of Plate.
1 Dollar of Plate	=	8 Reals of Plate.
17 Reals of Plate	=	32 Reals Vellon.
20 Reals Vellon	=	1 Hard Dollar.
1 Hard Dollar	=	371 Grains of fine Silver.
480 Grains	=	1 Ounce.
37 Ounces fine Silver	=	40 Ounces Standard.
1 Ounce Standard	=	62 Pence Sterling.

Reduced, gives 39d. Sterling per Dollar of Plate.

LONDON AND LISBON.—Gold.

The piece of 6400 Rees contains 203 English grains of fine gold;—what is the Par between London and Lisbon in gold?

		1000 Rees.
6400 Rees	=	203 Grains of fine Gold.
480 Grains	=	1 Ounce.
11 Ounces fine Gold	=	12 Ounces Standard Gold.
1 Ounce Standard	=	934½ Pence Sterling.

Reduced, gives 67,36d. Sterling per Milree.

According to the above methods, the other Pars, which are contained in the following Table, have been computed; but the statements and operations are left for the exercise of the learner.

It has been already shown (page 141) that when the quantity of pure metal in the monies of exchange is known, the Par is found by division; and it may be also found, by a similar operation, from the Table of Monies of Account, (page 149,) when the monies of exchange are of the same denomination. Thus, to find the Par between France and England, the Franc is worth 9,7 Pence in Silver, and 9,52 Pence in Gold, and therefore, 240 divided by these sums respectively will give the Pars in Gold and Silver as before.

Suppose it were required to find the Par between France and Spain, that is, how many Francs should be given for the Doubloon of Exchange of 4 Piastres? The Sterling value of the Doubloon, according to Table III. is 156 Pence, and this divided by 9,7 (the sterling value of the Franc) will give 16 Francs 19 Centimes, which is the Silver Par between those two countries. By the same method, the Par in Gold will be found to be 15 Francs 60 Centimes.

Thus, the monies of exchange may be found in the foregoing quotations, p. 19 to 103, and their values in the following Tables, by which the Pars may always be determined with sufficient accuracy by a simple operation as above.

TABLE I.

A TABLE *of the* PAR OF EXCHANGE *between England and the principal Places in Lloyd's List; computed from the intrinsic Value of their Coins, by comparing Gold with Gold and Silver with Silver, according to their Mint Regulations, and to Assays made at the London and Paris Mints, valuing English Gold at* £3 17*s.* 10½*d. per Oz. Standard, and English Silver at* 5*s.* 2*d. per Oz. Standard.*

	GOLD.		SILVER.		EXPLANATIONS.
	Mint Regulations.	Assays.	Mint Regulations.	Assays.	
Amsterdam, in Flemish..	40 3	——	38,6	——	Shillings and Pence Flem. per £1 Sterl.
Ditto, in Florins	12 09	——	11,58	——	Florins and Cents. per £1 Sterling.
Hamburgh	34 3,5	34 1,5	35 1	35 1,3	Shillings and Pence Flem. per £1 Sterl.
Paris	25 22	25 26	24 75	24 91	Francs and Centimes per £1 Sterling.
Madrid	37,3	37,2	39,2	39 0	Pence Sterling per Piastre.
Lisbon.....	67,4	67,5	——	——	Pence Sterling per Milree.
Leghorn	49,1	49,0	46,46	46,5	Pence Sterling per Pezza.
Genoa.....	45,5	45,5	45,92	45,92	Pence Sterling per Pezza fuori Banco.
Naples.....	41,2	——	41,2	——	Pence Sterling per Ducat.
———otherwise.....	582	——	582	——	Grains per £1 Sterling.
Venice.....	46,3	46,0	47,5	49,0	Lire Piccole per £1 Sterling.
———otherwise.....	23,44	23	24,30	25,07	Italian Livres per £1 Sterling.

These Tables (I. and II.) were originally computed by the author of this work, in 1810, by order of the Bullion-Committee of the House of Commons, and are printed in the Appendix to their Report.

They have been likewise inserted in that of the House of Lords, in 1819, with revisions which became necessary on account of recent alterations in the monies of Holland and Naples.

A further revision is now made in the Par of Exchange between England and France, in consequence of the error lately discovered in their relative weights; as explained vol. i. pp. 135 and 140.

This correction is two Centimes per Pound sterling in favour of England.

TABLE II.

THE RELATIVE VALUE OF GOLD AND SILVER *in the principal Trading Places of the World; computed from the proportional Quantity of pure Metal in their principal Coins, and the legal or current Price of those Coins respectively.*

	By Mint Regulations.	By Assays.	Names of the Coins from which the Proportions are taken.
England, By Old Coinage	15,2096 to 1	Proved correct by the Trials of the Pix.	Per Guinea and Old Shilling.
By New Coinage	14,2878 to 1		Per Sovereign and New Shilling.
Amsterdam	15,8735 to 1	———	Per 10 Guilder Piece decreed in 1816, and Silver Florin of the same Date.
Hamburgh	15 to 1 nearly	14,83 to 1	Per Ducato reckoned at 6 Marks Banco and Rixdollar.
Paris	15,5 to 1	15,5 to 1	Per 20 Franc Piece and 5 Franc Piece.
Madrid	16 to 1	15,85 to 16,46 to 1	Per Doubloon and Dollar of different Coinages.
Lisbon	13,56 to 1	13,33 to 1	Per Joannese and New Silver Crusado.
Leghorn	14,65 to 1	14,32 to 1	Per Ruspono and Francescone.
Genoa	15,34 to 1	15,35 to 1	Per Genovina and Scudo.
Naples	15,21 to 1	———	Per Oncetta and Ducato. (Coinage of 1818.)
Venice	15 to 1 nearly	14,35 to 1	Per Sequin and Ducat.
Petersburgh	15 to 1 nearly	15,25 to 1	Per Ducat and Ruble.
United States	15 to 1	15,94 to 1	Per Eagle and Dollar.
Bengal	14,857 to 1	14,827 to 1	Per Gold Mohur and Sicca Rupee.
Madras	13,872 to 1	13,857 to 1	Per Star Pagoda and Current Rupee.
Bombay	15 to 1	15 to 1	Per Gold Rupee and Silver Rupee.
China	14,25 to 1	———	Per Tale of Gold, and the Average Price of Spanish Dollars.

The foregoing Table may be computed by the Chain Rule, in the following manner.

Required the relative proportion between Gold and Silver in the English Coins, according to the Mint Regulations both of the Old and New System?

The question is, to compare the value of any certain quantity, suppose an ounce of pure Gold, with an ounce of pure Silver, at the Mint Price.

Old System.

1 Ounce pure Gold.
11 Ounces pure = 12 Ounces Standard.
1 Ounce Standard = 934½ Pence.
62 Pence = 1 Ounce Standard Silver.
40 Ounces Standard = 37 Ounces Pure.

Reduced, gives $15\frac{2850}{13640}$. Thus Gold, decimally expressed, is to Silver as 15,2096 to 1.

New System.

1 Ounce Pure Gold.
11 Ounces Pure = 12 Ounces Standard.
1 Ounce Standard = 934½ Pence.
66 Pence = 1 Ounce StandardSilver.
40 Ounces Standard = 37 Pure.

Reduced, gives $14\frac{1393}{4840}$. Thus Gold, decimally expressed, is to Silver as 14,2378 to 1.

The operation is more simple when the rate of fineness of both metals is expressed in the same manner. Thus, in the coinage of France, the 20 Franc Piece in Gold weighs 6,4516 Grammes in pure Gold, and 20 Francs in Silver weigh 100 Grammes: hence, the latter divided by the former will give 15,5, as in the Table, p. 147.

When the fineness differs in expression, the comparison may be made from the quantity of pure Gold and of pure Silver in any particular sum, found either by the Mint Regulations or by Assays. Thus, the English Sovereign contains 113 Grains of fine Gold; and 20 Shillings (new coinage) 1614,54 Grains of fine Silver: hence, the latter divided by the former will give the relative value very nearly as above.

MONIES OF ACCOUNT.

In the following Table of Monies of Account it may be observed that some of these monies are real coins, the value of which may be computed from the Mint Regulations or from Assays; but when they are imaginary monies, which is generally the case, their value must be found by their established proportion to real coins.

TABLE OF MONIES OF ACCOUNT.

TABLE III.

Containing the Value of the Monies of Account of different Places, (expressed in Pence Sterling and Decimals of Pence,) according to the Mint Price both of Gold and Silver in England; that is, £3 17s. 10½d. per Oz. Standard for Gold, and 5s. 2d. per Oz. Standard for Silver. (*See* vol. i. p. 217)

		Value in Silver. d.		Value in Gold. d.	
Aix la Chapelle..	Rixdollar current	31,	40	....	31, 43
Alicant	Libra or Peso	39,	40	....	37, 38
Amsterdam	Rixdollar	52,	54	....	variable*
	Florin (Old)	21,		....	ditto
	Florin (New)	20,	72	....	ditto
	Pound Flemish	124,	32	....	ditto
Antwerp	Pound Flemish (money of exchange)	123,	25	....	123, 87
	Florin (money of exchange)	20,	54	....	20, 64
	Pound Flemish current	105,	65	....	106, 18
	Florin current	17,	60	....	17, 70
Arragon	Libra Jaquesa	49,	25	....	46, 75
Augsburg	Florin Giro, or money of exchange	32,		....	31, 83
	Florin current	25,	20	....	25, 07
Barcelona	Libra Catalan	28,	14	....	26, 70
Basil	Rixdollar, or Ecu of exchange	47,	27	....	47,
	Rixdollar current	42,	45	....	42, 20
Bergamo	Scudo of 7 Lire	35,	67	....	36, 50
Berlin	Pound Banco	47,	25	....	variable
	Rixdollar current	36,		....	ditto
	Rixdollar in Fredericks	——†		....	39, 68

* In the places marked *variable*, the price of the coins is not fixed; and, therefore, the intrinsic value in gold of the monies of account cannot be ascertained for any length of time.

† Where the columns are marked with a dash, it is to be understood that there is no coin in the metal of that column by which the monies of account can be computed.

		Value in Silver. d.		Value in Gold. d.
Bern	Ecu of 3 Livres	42, 64	....	42, 90
	Crown of 25 Batzen	35, 53	....	35, 75
Bologna	Lira corrente	10, 86	....	10, 62
	Lira, money of exchange	11, 12	....	10, 89
Bolsano	Florin Giro, or money of exchange	33, 26	....	33, 08
	Florin moneta lunga, or currency	25, 20	....	25, 06
Bremen	Rixdollar current	37, 80	....	variable
	Rixdollar in Carl d'ors	———	....	39, 68
Canary Islands	Real current	3, 95	....	3, 66
Cassel	Rixdollar current	37, 80	....	variable
Cologne	Rixdollar specie of 80 Albuses	31, 38	....	ditto
	Rixdollar current of 78 Albuses	30, 60	....	ditto
Constantinople	Piastre, or Dollar, 1819	9, 45	....	uncertain
Dantzic	Gulden or Florin	9,	....	9,
Denmark	Rixdollar specie	54, 72	....	———
	Rixdollar Sundish specie	53, 21	....	———
	Rixdollar Crown money	48, 37	....	———
	Rixdollar Danish currency	44, 27	....	44, 88
	Rixdollar Holstein currency	43, 78	....	44, 16
England	Pound Sterling	240,	....	240,
Florence	Lira	8, 12	....	8, 53
	Ducat, or Crown current	56, 84	....	59, 71
	Scudo d'oro, or Gold Crown	———	....	63, 97
France	Livre Tournois	9, 58	....	9, 40
	Franc (new system)	9, 70	....	9, 52
Francfort	Rixdollar, Convention money	37, 80	....	37, 65
	Rixdollar Muntze, or in small coins	31, 50	....	———
Geneva	Livre current	16, 13	....	16, 93
	Florin	4, 60	....	4, 84
Genoa	Lira fuori Banco	7, 99	....	7, 83
	Pezza, or Dollar of exchange	45, 92	....	45, 50
	Scudo di cambio, or Crown of exchange	36, 75	....	36, 02
	Scudo d'oro marche	85, 49	....	83, 77

		Value in Silver. d.		Value in Gold. d.
GERMANY	Rixdollar current	37, 80	....	variable
	Rixdollar specie	50, 40	....	ditto
	Florin of the Empire	25, 20	....	ditto
	Rixdollar Muntze	31, 50	....	ditto
	Florin Muntze	21,	....	ditto
HAMBURGH	Mark Banco (at a medium)	18, 22	....	variable
	Pound Flemish Banco	136, 65	....	ditto
	Mark current	14, 82	....	ditto
	Pound Flemish current	111, 15	....	ditto
HANOVER	Rixdollar, in cash	42,	....	42, 26
	Rixdollar, gold value	39,	....	39, 24
IRELAND	Pound Irish	221, 54	....	221, 54
KONIGSBERG	Gulden or Florin	12,	....	variable
LEGHORN	Pezza of 8 Reals	46, 25	....	49, 16
	Lira moneta buona	8, 13	....	8, 55
	Lira moneta lunga	7, 79	....	8, 19
LEIPSIC	Rixdollar Convention money	37, 80	....	variable
	Rixdollar in Louis d'ors or Fredericks	———	....	39, 68
LUCCA	Lira	7, 40	....	7, 77
	Scudo d'oro	55, 50	....	58, 27
	Scudo corrente	51, 80	....	54, 39
MALTA	Scudo, or Crown	21, 32	....	23, 34
MILAN	Lira Imperiale	10, 41	....	10, 53
	Lira corrente	7, 45	....	7, 30
	Scudo Imperiale	60, 90	....	61, 60
	Scudo corrente	42, 32	....	42, 78
MODENA	Lira	3, 72	....	33, 15
MUNICH	Gulden or Florin	21,	....	21, 28
NANCY	Livre (money of Lorraine)	7, 38	....	7, 26
NAPLES	Ducato di regno	41, 20	....	uncertain
NAVARRE	Real	4, 90	....	4, 67
	Libra	8, 20	....	7, 79
NEUFCHATEL	Livre Tournois	13, 63	....	13, 40
	Livre foible	5, 45	....	5, 36

		Value in Silver. d.		Value in Gold. d.
Novi	Scudo d'oro marche	85, 49	....	83, 77
Parma	Lira	2, 35	....	2, 30
Persia	Toman of 100 Mamoodis	287, 60	....	———
Poland	Gulden or Florin	6, 03	....	6, 27
Portugal	Milree	uncertain	....	67, 34
	Old Crusado	uncertain	....	26, 94
Prague	*(See Vienna.)*			
Riga	Rixdollar Alberts	52, 54	....	variable
	Rixdollar currency, (agio at 40 per cent.)	37, 53	....	ditto
Rome	Scudo, or Crown	52, 05	....	51, 63
	Scudo di Stampa d'oro	79, 37	....	78, 73
Russia	Ruble	variable		
St. Gall	Florin, money of exchange	27, 44	....	variable
	Florin current	22, 76	....	ditto
St. Remo	Lira	8, 46	....	8, 90
Sardinia	Lira	18, 21	....	18, 82
Sicily	Ounce	123, 54	....	124, 80
	Scudo, or Crown	49, 02	....	49, 92
Spain	Real of old plate	4, 88	....	4, 57
	Real of new plate	5, 18	....	4, 86
	Real of Mexican plate	6, 48	....	6, 07
	Real Vellon	2, 59	....	2, 43
	Dollar of old plate or of exchange	39,	....	37, 30
Stralsund	Rixdollar of account	28, 35	....	variable
	Pomeranian Gulden	14, 18	....	ditto
Strasburg	Livre and Franc *(see France.)*			
	Florin	19, 08	....	18, 76
Sweden	Rixdollar	55, 41	....	56, 43
Switzerland	Franc (new system)	22, 14	....	———
Trieste	Florin, Austrian currency	25, 20	....	25, 05
	Lira, Trieste currency	4, 76	....	4, 73
	Lira di Piazza	4, 65	....	4, 63
Turin	Lira	11, 28	....	11, 23
Valencia	Libra	39, 45	....	36, 59

		Value in Silver. d.		Value in Gold. d.
VENICE	Lira piccola (in the old coins)	5, 07	....	variable
	Lira piccola (in the coins introduced by the Austrians)	4, 25	....	ditto
VIENNA	Florin	25, 20	....	25, 05
ZANTE	Lira	4, 06	....	variable
ZURICH	Florin, money of exchange	25, 85	....	ditto
	Florin current	23, 50	....	ditto

The foregoing Table has been computed from the proportion which the monies of account bear to the coins of each place respectively, valued according to the Mint Regulations, as stated in the first volume of this work. Thus, the intrinsic par of exchange may be calculated both in gold and silver, where the monies of exchange are the same as those of account; but dealers in bills, coin, and bullion generally prefer computations from actual assays, such as are given in the following Tables.

TABLES OF COINS FROM ASSAYS.

The first of the following Tables was computed under the direction of Sir Isaac Newton, in 1717, when he was Master of the Mint, and it served long as a Rule or Standard for Bullion and Exchange Merchants; but, however correct this Table might have originally been, it is no longer to be depended on, as many of the Coins are out of circulation, while others have been considerably altered; and it may be further remarked, that the art of assaying Metals, and even of weighing accurately, has been much improved since the above period.

Although these Assays are now become, in a great measure, obsolete, yet it is thought proper to insert them in this Work by way of introduction to the New Tables which follow, and which may be considered as a revision of Sir Isaac Newton's Tables, and a continuation of his plan.

N.B. In the Assay Column in the following Tables, B. means better, and W. worse than the English Standard. Thus, in the Gold Table, B. 1 2 means 1 Carat 2 Grains better than English standard; that is, 23 Carats 2 Grains fine: and W. 0 1½ means 1½ Grain worse than the English standard, that is, 21 Carats 2½ Grains fine.

Again, in the Silver Table, B. 7 Dwt. means 11 Oz. 9 Dwt. fine, and W. 3 Dwt. is 10 Oz. 19 Dwt. fine. For the English Standards, see vol. i. p. 217.

TABLE IV.

Sir Isaac Newton's Assays, Weights, and Values of most Foreign Silver and Gold Coins, actually made at the London Mint, by Order of the Privy Council, before the Year 1717. *First published in* 1719, *and re-published, by Authority, in* 1740.

FOREIGN SILVER COINS.	Assay. dw.	Weight. dw. gr.	Stand. Weight. dw. gr. mi.	Value. d.
The Piastre of Spain, or Seville Piece of 8 Reals, now reduced to 10..	W. 1	17 12	17 10 2	54
The New Seville Piece of Eight	W. 1½	14	13 21 15	43.11
The Mexico Piece of Eight	W. 1	17 10⅝	17 8 14	53.83
The Pillar Piece of Eight	Stand.	17 9	17 9	53.87
The Peru Piece of Eight, coarser but of uncertain allay				
The Old Ecu of France, or Piece of 60 Sols Tournois	W. 1	17 12	17 10 2	54
The New Ecu, or Piece of 5 Livres, or 100 Sols	W. 1½	19 14½	19 11 12	60.39
The Crusado of Portugal, or Ducat worth 400 Rees, now marked and raised to 480 Rees	W. 2	11 4	11 1 13	34.31
The Patacks, or Patagons of Portugal, worth 500 Rees, now marked and raised to 600				
The Ducatoon of Flanders, or Piece of 60 Sols or Patars	B. 4½	20 22	21 8 2	66.15
The Patagon of Flanders, or Cross Dollar, or Piece of 48 Patars..	W. 12	18 1	17 1 13	52.91
The Ducatoon of Holland, or Piece of 63 Stivers	B. 3	20 21	21 3 15	65.59
The Patagon Legdollar, or Rixdollar of Holland, or Piece of 50 Stivers	W. 14	18	16 20 17	52.28
The Three Guilder Piece of Holland, or Piece of 60 Stivers	W. 2	20 8	20 3 12	62.46
The Guilder, Florin, or Piece of 20 Stivers	W. 2	6 18½	6 17 1	20.08
The Ten Shilling Piece of Zeland, or Piece of 60 Stivers	W. 2	20 6	20 1 13	62.21
The Lion Dollar of Holland, or ⅔ of the Ducatoon	W. 44	17 14	14 2 7	43.07
The Ducatoon of Cologne	B. 3	20 13	21 — 15	65.02
The Rixdollar, or Patagon of Cologne	W. 13	18	16 22 14	52.53
The Rixdollar, or Patagon of the Bishop of Liege	W. 12	17 22½	16 22 5	55.48
The Rixdollar of Mentz	W. 6½	18 8	17 19 18	55.27
The Rixdollar of Francfort	W. 9	18 8	17 14 4	54.53
The Rixdollar of the Elector Palatine of the Rhine and Bavaria before 1620	—	18 5		
The Rixdollar of Nuremberg	W. 6	18 10	17 22 1	55.55
The Old Rixdollar of Lunemburg	W. 10	18 11	17 15 2	54.65
The Old Rixdollar of Hanover	W. 8	18 12	17 20 2	55.03
The Double Gulden of the Elector of Hanover	W. 7	18 18	18 3 16	56.29
The Gulden of the Elector of Hanover, or Piece of ⅔	B. 17½	8 10	9 1 18	28.14
The Half Gulden of the Elector of Hanover, or Piece of ⅓	B. 17½	4 5	4 12 19	14.07
The Gulden of the Duke of Zell, or Piece of 16 Gute Groshen	W. 43	11 2	8 22 10	27.07
The Gulden of the Bishop of Hildesheim, or Piece of 24 Marien Grosh, now raised to 26	W. 40½	11 22	9 17 17	30.21
The Rixdollar of Magdeburgh	W. 10	18 12	17 16 1	54.27
The Gulden or Guilder of Magdeburgh	W. 44	11 14	9 6	28.67
The Old Rixdollar of the Elector of Brandenburgh	W. 9	18 13	17 19 1	55.17
The Old Gulden of Brandenburgh, now raised from 24 to 26 Marien Grosh	W. 43	12 4	9 19 9	30.41
The Gulden of Brandenburgh, or Piece of ⅔	W. 43	11 3	8 23 6	27.81
The Half Gulden of Brandenburgh, or Piece of ⅓	W. 43	5 13	4 11 14	13.09
The Gulden of the Elector of Saxony, or Piece of ⅔	W. 41	11 3	9 1 14	28.12

FOREIGN SILVER COINS.

	Assay. dw.	Weight. dw.	gr.	Stand. Weight. dw.	gr.	mi.	Value. d.
The Old Bank Dollar of Hamburgh	W. 8	18	9	17	17	4	54.92
The Old Rixdollar of Lubec	W. 8½	18	16	17	22	17	55.54
The Four Mark Piece of Denmark of coarser allay	W. 6t	14	8	10	9	10	32.23
The Four Mark Piece of Denmark of finer allay	W. 21	11	13½	10	11	5	32.45
The Eight Mark Piece of Sweden	Stand.	20		20			62
The Four Mark Piece of Sweden	W. 58	13	12	9	23	7	30.92
The Two Mark Piece of Sweden	W.	6	19				
The Old Dollar of Dantzic	W. 10½	18	9	17	12	4	54.27
The Old Rixdollar of Thorn near Dantzic	W. 12	18	8½	17	8	15	53.85
The Rixdollar of Sigismund III. and Vladislaus IV. Kings of Poland	W. 10	18	9	17	13	14	54.04
The Rixdollar of the late Emperor Leopold	W. 10½	18	9	17	12	4	54.27
The Rixdollar of his Predecessor Ferdinand III.	W. 10½	18	9	17	12	4	54.27
The Rixdollar of Ferdinand, Archduke of Austria	W. 10½	18	5	17	8	7	53.78
The Rixdollar of Basil	W. 7½	18	18½	18	3	6	56.24
The Rixdollar of Zune	W. 13	18	1	16	23	13	52.65
The Old Ducat of Venice, with the words *Ducatus Venetus* upon it, a Piece of 6 Old Livres, afterwards raised, I think, to 6 Livres 4 Sols de Piccoli	W. 23½	14	15	13	1	17	40.50
The Half Ducat	W. 23½	7	7½	6	12	8	20.25
The New Ducat, with the No. 124 upon it, signifying 124 Sols, or 6 Livres 4 Sols de Piccoli	—	18	2				
The Half thereof	—	9	1				
The Crusado, Crosaid, or St. Mark of Venice, with the No. 140 upon it, signifying 140 Sols, or 7 Livres de Piccoli	—	20	6				
The Half Crusado of the same form	—	10	3				
The Quarter Crusado of the same form	—	5	1				
Another Coin of Venice	W. 46	17	10	13	19	8	42.08
The Piece of two Jules	B. 6	3	15	3	17	7	11.05
The Ducat de Banco of Naples, or Piece of 5 Tarins, or 10 Carlins, or 100 Grains	W. 3	14	0¼	13	1		40.43
The Half Ducat	W. 3	7	0⅛	6	12	10	20.21
The Tarin, or Fifth Part of the Ducat	W. 3	2	19¼	2	14	12	8.09
The Carlin, or Tenth Part of the Ducat	W. 3	1	9½	1	7	6	4.04
The Escudi, Ecu, or Crown of Rome, or Piece of 10 Julios, or 100 Bayoches	—	20	14½				
The Teston of Rome, or Piece of 3 Julios	W. 1	5	21½	5	20	17	18.32
The Ducat of Florence and Leghorn, or Piece of 7 Lires, or 10½ Julios	B. 8	20	3	20	20	6	64.62
The Julio of Rome		2	5				
The Piastre Ecu, or Crown of Ferdinand II. Duke of Tuscany	W. 1	17	12	17	10	2	54
The Piastre Ecu, or Crown of Cosmus III. present Duke of Tuscany, whose monies are about 4 per cent. lighter than those of his father's; this Piece is 8½ Julios	W. 1	16	18	16	16	4	51.69
The Croisat of Genoa, or Piece of 7½ Lires	B. 7	24	15	25	9	11	78.74
The Ecu d'Argent of Genoa, or Piece of 7 Lires 12 Sols							
The Piastre Ecu, or Crown of Milan	—	17	21				
The Philip of Milan, or Piece of 7 Livres	—	20	20				
The Livre, or 20 Sols Piece of Savoy	—	3	22				
The 10 Sols Piece of Savoy	—	1	23				
A Roupee	B. 16½	7	10	7	23	4	24.07
A Gout Gulden, or Florin d'Or, a Dutch Coin of 28 Stivers	W. 75	12	19	8	11	5	26.26
Another Gout Gulden	W. 48	11	00	8	14	18	26.72
Another	W. 48	12		9	9	15	29.15

GOLD COINS UNWORN.

	Assay.		Weight.		Stand. Weight			Value.	
	car.	gr.	dw.	gr.	dw.	gr.	mi.	s.	d.
The Old Louis d'Or	W. 0	$0\frac{1}{2}$	4	8	4	7	8	16	9.3
The Half and Quarter in proportion	W. 0	$0\frac{1}{2}$	2	4	2	3	14	8	5
The New Louis d'Or	W. 0	$1\frac{1}{2}$	5	$5\frac{2}{3}$	5	3	18	20	0.6
The Half and Quarter in proportion	W. 0	$1\frac{1}{2}$	2	$14\frac{7}{10}$	2	13	19	10	0.3
The Old Spanish Double Doubloon	W. 0	$0\frac{1}{2}$	17	8	17	5	12	67	1.4
The Old Spanish Double Pistole	W. 0	$0\frac{1}{2}$	8	16	8	14	16	33	6.7
The Old Spanish Pistole	W. 0	$0\frac{1}{2}$	4	8	4	7	8	16	9.3
The New Seville Double Pistole	W. 0		8	$16\frac{1}{3}$					
The New Seville Pistole			4	$8\frac{1}{6}$					
The Half and Quarter in proportion.									
The Doppia Moeda, or Double Moeda of Portugal new coined	W. 0	$0\frac{1}{4}$	6	22	6	21	12	26	10.4
The Doppia Moeda as they come into England	W. 0	$0\frac{1}{4}$	6	$21\frac{3}{4}$	6	21	7	26	9.9
The Moeda of Portugal	W. 0	$0\frac{1}{4}$	3	11	3	10	16	13	5.1
The Half Moeda	W. 0	$0\frac{1}{4}$	1	$17\frac{1}{2}$	1	17	8	6	8.5
The Hungary Ducat	B. 1	2	2	$5\frac{2}{3}$	2	9	7	9	3.6
The Ducat of Holland, coined at Legem Imperii	B. 1	2	2	$5\frac{1}{2}$	2	9	3	9	3.2
The Ducat of Campen in Holland	B. 1	2	2	$5\frac{1}{2}$	2	9	3	9	3.2
The Ducat of the Bishop of Bamberg	B. 1	2	2	$5\frac{1}{2}$	2	9	3	9	3.2
The Double Ducat of the Duke of Hanover	B. 1	2	4	$10\frac{1}{2}$	4	17	9	18	4.8
The Ducat of the Duke of Hanover	B. 1	2	2	$5\frac{1}{4}$	2	8	18	9	2.7
The Ducat of Brandenburgh	B. 1	2	2	$5\frac{1}{2}$	2	9	3	9	3.2
The Ducat of Sweden	B. 1	2	2	$5\frac{1}{2}$	2	9	3	9	3.2
The Ducat of Denmark	B. 1	2	2	$5\frac{1}{2}$	2	9	3	9	3.2
The Ducat of Poland	B. 1	2	2	5	2	8	12	9	2.1
The Ducat of Transylvania	B. 1	$1\frac{1}{2}$	2	$4\frac{3}{4}$	2	7	6	8	11.6
The Sequen, Chequin, or Zacheen of Venice	B. 1	$3\frac{1}{2}$	2	$5\frac{3}{4}$	2	10	7	9	5.7
The Old Italian Pistole	W. 0	$0\frac{1}{4}$	4	$6\frac{3}{4}$	4	6	11	16	7.6
The Double Pistole of Pope Urban, 1634	—		8	$14\frac{1}{2}$					
The Half Pistole of Innocent II. 1685	—		2	4					
A Double Pistole of Placentia	—		8	10					
A Double Pistole of Genoa, 1621	—		8	16					
A Double Pistole of Milan	—		8	$13\frac{1}{2}$					
A Single Pistole of Milan	—		4	$6\frac{3}{4}$					
A Pistole of Savoy, 1675	—		4	$8\frac{1}{2}$					
Double Ducats of Castile, Genoa, Portugal, Florence, Hungary, and Venice	B. 1	$2\frac{1}{2}$	4	11	4	18	18	18	7.7
Single Ducats of the same places	B. 1	$2\frac{1}{2}$	2	$5\frac{1}{2}$	2	9	9	9	3.8
Double Ducats of several forms in Germany	B. 1	1	4	11	4	17	1	18	4
Single Ducats of the same places	B. 1	1	2	$5\frac{1}{2}$	2	8	$5\frac{1}{2}$	9	2
Double Ducats of Genoa	B. 1	2	4	11	4	18	6	18	6.5
Single Ducats of Genoa, Besançon, and Zurich	B. 1	2	2	$5\frac{1}{2}$	2	9	3	9	3.2
Pistole of Rome, Milan, Venice, Florence, Savoy, Genoa, Orange, Trevou, Besançon	W. 0	$0\frac{1}{4}$	4	6	4	5	17	16	6.7
A Barbary Ducat, with Arabic letters on both sides in square tablets, without any effigies or escutcheon	W. 2	$1\frac{1}{2}$	2	$16\frac{1}{4}$	2	9	6	9	3.5

NEW TABLE OF GOLD COINS.

TABLE V.

Containing the Assays, Weights, and Values of the principal Gold Coins of all Countries, computed according to the Mint Price of Gold in England, and from Assays made both at London and Paris, which have been found to verify each other.

The London Assays have been made by Robert Bingley, *Esq. F.R.S. the King's Assay Master of the Mint, and those at Paris by* Pierre Frederic Bonneville, *Essayeur du Commerce, as published in his elaborate Work on the Coins of all Nations.**

		Assay.	Weight.	Stan. Weight	Contents in Pure Gold.	Value in Sterling.
		car. gr.	dwt. gr.	dwt. gr. mi	grains.	s. d.
America	*(See Portugal, Spain, & United States.)*					
Augsburg	Ducat	B. 1 1¾	2 5¼	2 8 8	52, 1	9 2,64
Austrian Dominions	Souverain	W. 0 0¼	3 14	3 13 15	78, 6	13 10,92
	Double Ducat	B. 1 2¾	4 12	4 20 5	106, 4	18 9,97
	Ducat	B. 1 2¾	2 6	2 10 2	53, 2	9 4,98
	Ducat Kremnitz, or Hungarian	B. 1 3	2 5¾	2 10 3	53, 3	9 5,91
Baden	Ducat	B. 1 2¾	1 23½	2 3 2	46, 9	8 3,60
Basil	Ducat	Stand.	2 4½	2 4 10	48, 1	8 6,14
	Pistole	W. 0 2½	4 22	4 18 13	105, 1	18 7,20
Bavaria	Carolin	W. 3 2	6 5¼	5 5 10	115,	20 4,23
	Max d'or, or Maximilian	W. 3 2¼	4 4	3 14 0	77,	13 7,44
	Ducat	B. 1 2¼	2 5¾	2 19 11	52, 8	9 4,12
	Pistole *(See Manheim)*					
Bern	Ducat (Double, &c. in proportion)	B. 1 1¾	1 23	2 2 1	45, 9	8 1,48
	Pistole	W. 0 1½	4 21	4 19 0	105, 5	18 7,86
Bologna	*(See Rome)*					
Brunswick	Pistole (Double in proportion)	W. 0 1½	4 21¾	4 19 5	105, 7	18 8,48
	Carl d'or, before 1802, (Double in prop.)	W. 0 1½	4 6½	4 4 15	92, 5	16 4,44
	Carl d'or, since 1802, (Double in prop.)	W. 0 2½	4 6½	4 3 11	92,	16 3,38
	Ducat	B. 1 0½	2 5¾	2 8 9	51, 8	9 2
Cologne	Ducat	B. 1 2	2 5¾	2 9 8	52, 6	9 3,70
Constantinople	*(See Turkey.)*					
Denmark	Ducat current	W. 0 3¾	2 0	1 21 19	42, 2	7 5,62
	Ducat specie	B. 1 2	2 5¾	2 9 8	52, 6	9 3,70
	Christian d'or	W. 0 1	4 7	4 5 16	93, 3	16 6,14
East Indies	*(See* p. 161.)					
England	Guinea	Stand.	5 9½	5 9 10	118, 7	21 0
	Half Guinea	Stand.	2 16¾	2 16 15	59, 3	10 6
	Seven Shilling Piece	Stand.	1 19	1 19 0	39, 6	7 0

* Specimens of all the foreign coins brought to London for commercial purposes have been supplied for this Work from the Bullion-Office, Bank of England, by order of the *Bank Directors*, and have been selected by *John Humble, Esq.* the chief of that Office, who also examined the Tables in their progress. It may likewise be added, that the Mint Reports of these commercial Coins are chiefly from Average Assays, and that all the computations have been carefully verified by different calculators.

		Assay. car. gr.	Weight. dwt. gr.	Stan. Weight dwt. gr. mi.	Contents in Pure Gold. grains.	Value in Sterling. s. d.
ENGLAND	Sovereign	Stand.	5 3¼	5 3 5	113, 1	20 0
FLANDERS	*(See Austrian Dominions.)*					
FLORENCE	*(See Tuscany.)*					
FRANCE	Double Louis (coined before 1786)	W. 0 2	10 11	10 5 6	224, 9	39 9,64
	Louis	W. 0 2	5 5½	5 2 12	112, 4	19 10,71
	Demi Louis	W. 0 2	2 14¾	2 13 6	56, 2	9 11,38
	Double Louis (coined since 1786)	W. 0 1½	9 20	9 15 19	212, 6	37 7,53
	Louis	W. 0 1½	4 22	4 19 19	106, 3	18 9,75
	Double Napoleon, or Piece of 40 Francs	W. 0 1¾	8 7	8 3 0	179, .	31 8,36
	Napoleon, or Piece of 20 Francs	W. 0 1¾	4 3½	4 1 10	89, 7	15 10,5
	New Louis (Double, &c.) the same as the Napoleon					
FRANCFORT ON THE MAINE	Ducat	B. 1 2½	2 5¾	2 9 14	52, 9	9 4,34
GENEVA	Pistole, Old	W. 0 2	4 7¼	4 4 18	92, 5	16 4,45
	Pistole, New	W. 0 0½	3 15¾	3 15 4	80,	14 1,9
GENOA	Doppia, or Pistole, (Pieces of 2, 4, &c. in proportion)	W. 0 1½	4 7½	4 5 14	93, 4	16 6,36
	Sequin	B. 1 3½	2 5¾	2 10 6	53, 4	9 5,41
	Genovina of 100 Lire (½ &c. in prop.)	W. 0 1	18 3	17 22 0	394, 2	69 9,20
	New Genovina, of 96 Lire or 4 Pistole Piece of the Ligurian Republic	W. 0 0½	16 4	16 1 15	357, 7	63 3,68
	Ditto of 48 Lire, (Pieces of 24 & 12 in proportion)	W. 0 0½	8 2	8 0 18	178, 9	31 7,95
HAMBURGH	Ducat (Double in proportion)	B. 1 2½	2 5¾	2 9 14	52, 9	9 4,35
HANOVER	George d'or	W. 0 1¼	4 6½	4 5 3	92, 6	16 4,66
	Ducat	B. 1 3¼	2 5¾	2 10 3	53, 3	9 5,19
	Gold Florin (Double in proportion)	W. 3 0½	2 2	1 18 6	39,	6 10,83
HESSE CASSEL	Pistole	W. 0 2½	4 7¼	4 4 8	92,	16 3,39
	William d'or of 1815	W. 0 1¾	4 6½	4 4 9	92, 1	16 3,6
HESSE DARMSTADT	Carolin	W. 3 2	3 3	2 15 0	58,	10 3,18
	Ducat	B. 1 3	2 5¾	2 10 0	53, 2	9 4,98
HOLLAND	Double Ryder	Stand.	12 21	12 21 0	283, 2	50 1,46
	Ryder	Stand.	6 9	6 9 0	140, 2	24 9,75
	Half Ryder	Stand.	3 4½	3 4 10	70, 1	12 4,87
	Ducat	B. 1 2¼	2 5¾	2 9 12	52, 8	9 4,13
HUNGARY	*(See Austrian Dominions.)*					
JAPAN	*(See East Indies,* p. 161.)					
LEGHORN	*(See Tuscany.)*					
LEIPSIC	*(See Saxony.)*					
LIEGE	Ducat	B. 1 1½	2 5½	2 3 16	52, 3	9 3,07
LORRAINE	Leopold	W. 0 1	7 5½	7 3 15	157, 4	27 10,28
	Francis	W. 0 1	4 7¼	4 6 1	93, 6	16 6,78
LUCCA	Pistole	W. 0 0¼	3 13¼	3 13 0	77, 9	13 9,44
MALTA	Double Louis	W. 1 3¼	10 16	9 18 18	215, 3	38 1,25
	Louis	W. 1 3	5 8	4 21 16	108,	19 1,37
	Demi Louis	W. 1 2¼	2 16	2 11 3	54, 5	9 7,75
MANHEIM	Carolin (⅕ and ¼ in proportion)	W. 3 2	6 4½	5 4 16	114, 4	20 2,96
	Pistole	W. 0 1½	4 6½	4 4 16	92, 3	16 4,02
	Ducat	B. 1 2¼	2 5½	2 9 10	52, 8	9 4,13
MENTZ	Ducat	B. 1 2½	2 5¾	2 9 12	52, 9	9 4,34
MILAN	Sequin	B. 1 3	2 5¾	2 10 0	53, 2	9 4,98
	Doppia, or Pistole	W. 0 1	4 1½	4 0 8	88, 4	15 7,74

		Assay. car. gr.	Weight. dwt gr.	Stan. Weight dwt. gr. mi.	Contents in Pure Gold. grains.	Value in Sterling. s. d.
MILAN	40 Lire Piece of 1808	W. 0 1⅞	8 8	8 4 0	179, 7	31 9,64
NAPLES	Six Ducat Piece of 1752	W. 1 0¼	5 16	5 9 8	118, 7	21 0,69
	Six Ducat Piece of 1767 and 1772	W. 1 2⅞	5 18	5 7 14	116, 8	20 8,06
	Six Ducat Piece of 1783	W. 0 2¼	5 16	5 12 18	121, 9	21 6,89
	Four Ducat Piece, or Pistole, of 1752	W. 1 0¼	3 18¼	3 14 6	79, 2	14 0,20
	Four Ducat Piece of 1767 and 1770	W. 1 2⅞	3 18¼	3 11 6	76, 8	13 7,10
	Two Ducat Piece, or Sequin, of 1762	W. 1 2⅞	1 20¼	1 16 6	37, 4	6 7,42
	Three Ducat Piece, or Oncetta of 1818	B. 1 3½	2 10¼	2 15 1	58, 1	10 3,40
NETHERLANDS	Souverain *(See Austrian Dominions)*					
	Gold Lion, or 14 Florin Piece	Stand.	5 7⅜	5 7 16	117, 1	20 8,69
	Ten Florin Piece (1820)	W. 0 1⅜	4 7¼	4 5 15	93, 2	16 5,93
NUREMBERG	Ducat (Double, &c. in proportion)	B. 1 2	2 5¼	2 9 8	52, 6	9 3,71
PARMA	Quadruple Pistole (Double in prop.)	W. 1 0	18 9	17 12 18	386,	68 3,78
	Pistole or Doppia of 1787	W. 0 3	4 14	4 10 4	97, 4	17 2,85
	Ditto of 1796	W. 1 0¼	4 14	4 8 14	95, 9	16 11,67
	Maria Theresa (1818)	W. 0 1⅜	4 3½	4 1 10	89, 7	15 10,5
PERSIA	*(See East Indies, p. 161.)*					
PIEDMONT	Pistole or Doppia (1741 to 1785)	W. 0 1¼	6 4½	6 2 8	134, 2	23 9,01
	Pistole, coined since 1785 (½ &c. in prop.)	W. 0 1¼	5 20	5 17 0	125, 6	22 2,75
	Sequin (½ in proportion)	B. 1 2½	2 5⅜	2 9 12	52, 9	9 4,34
	Carlino, coined before 1785	W. 0 1½	31 0½	30 11 14	670, 3	118 8,64
	Carlino, coined since 1785 (½ &c. in prop.)	W. 0 1¼	29 6	28 20 0	634, 4	112 3,33
	Piece of 20 Francs, called *Marengo*	W. 2 0	4 3¼	3 18 4	82, 7	14 7,63
POLAND	Ducat	B. 1 2½	2 5⅜	2 9 12	52, 9	9 4,34
PORTUGAL	Dobraon of 24,000 Rees	Stand.	34 12	34 12 0	759,	134 3,96
	Meio Dobraon of 12,000 Rees	Stand.	17 6	17 6 0	379, 5	67 1,98
	Dobra of 12,800 Rees	Stand.	18 6	18 6 0	101, 5	71 0,70
	Joannese of 6400 Rees	W. 0 0¼	9 6½	9 5 16	203, 4	35 11,98
	Half Joannese of 3200 Rees	W. 0 0¼	4 15	4 14 12	101, 5	17 11,56
	Moidore or Lisbonnine (½, &c. in prop.)	Stand.	6 22	6 22 0	152, 2	26 11,24
	Piece of 16 Testoons, or 1600 Rees	W. 0 0⅜	2 6	2 5 14	49, 3	8 8,70
	Piece of 12 Testoons, or 1200 Rees	W. 0 0⅜	1 16¼	1 16 0	36, 7	6 5,94
	Piece of 8 Testoons	W. 0 0⅜	1 4½	1 4 6	26,	4 7,21
	Old Crusado of 400 Rees	W. 0 0½	0 15	0 14 18	13, 6	2 4,88
	New Crusado of 480 Rees	W. 0 0⅝	0 16¼	0 16 2	14, 8	2 7,43
	Milree (coined for the African Colonies, 1755)	Stand.	0 19⅜	0 19 15	18, 1	3 2,44
PRUSSIA	Ducat of 1748	B. 1 2½	2 5⅜	2 9 14	52, 9	9 4,34
	Ducat of 1787	B. 1 2	2 5¾	2 9 6	52, 6	9 3,71
	Frederick (Double) of 1769	W. 0 1¾	8 14	8 9 18	185,	32 8,90
	Frederick (Single) of 1778	W. 0 1⅛	4 7	4 5 4	92, 8	16 5,08
	Frederick (Double) of 1800	W. 0 2	8 14	8 9 6	184, 5	32 7,84
	Frederick (Single) of 1800	W. 0 2	4 7	4 4 13	92, 2	16 3,42
RATISBON	Four Ducat Piece	B. 1 2	8 21	9 11 0	77, 2	36 10,81
ROME	Doppia, or Pistole, of Pius VI.	W. 0 0⅞	3 13	3 12 5	77, 2	13 7,59
	Ditto, of Pius VII. 1802 (½ &c. in prop.)	W. 0 1½	3 13	3 11 12	76, 6	13 6,68
	Zecchino, or Sequin, (coined before 1760)	B. 1 2	2 4½	2 8 0	51, 4	9 1,16
	Sequin (coined since 1760)	B. 1 3½	2 4½	2 9 0	52, 2	9 2,86
	Scudo of the Republic	W. 0 1¾	17 0¼	16 16 6	367,	64 11,43
RUSSIA	Ducat of 1751	B. 1 1¼	2 5	2 8 4	51, 5	9 1,37
	Double Ducat of St. Andrew of 1756	B. 1 2½	4 10	4 17 16	104, 4	18 5,72
	Ducat of 1796	B. 1 2½	2 6	2 10 0	53, 2	9 4,98
	Ducat of 1763	B. 1 2	2 5¾	2 9 8	52, 6	9 3,71

		Assay. car. gr.	Weight. dwt. gr.	Stan. Weight. dwt. gr. mi.	Contents in Pure Gold. grains.	Value in Sterling. s. d.
Russia	Half Ducat of 1785	W. 0 0½	1 14½	1 14 6	35, 1	6 2,54
	Gold Ruble of 1756	Stand.	1 0½	1 0 10	22, 5	3 11,78
	Ditto of 1799	W. 0 0¼	0 18¾	0 18 14	17, 1	3 0,31
	Gold Poltin of 1777	Stand.	9	0 9 0	8, 2	1 5,41
	Imperial (coined before 1763)	Stand.	10 16	10 16 0	234, 7	41 6,45
	Imperial of 1763	Stand.	8 9½	8 9 10	184, 7	32 8,06
	Imperial of 1772	W. 0 0¼	8 11	8 10 8	185, 5	32 9,96
	Half Imperial of 1780	W. 0 0¼	4 2½	4 2 4	90,	15 11,14
	Imperial of 1801	B. 1 2¼	7 17¼	8 6 8	181, 9	32 2,31
	Half Imperial of 1801	B. 1 2¼	3 20½	4 3 4	90, 9	16 1,05
	Ditto of 1818	B. 0 0⅛	4 3½	4 3 12	91, 3	16 1,98
St. Gall	Ducat	B. 0 3	21 20½	22 15 2	497, 9	88 1,44
Saltzburg	Ducat	B. 1 2	2 5¾	2 9 8	52, 6	9 3,71
Sardinia	Carlino (½ in proportion)	W. 0 2¾	10 7½	9 23 16	219, 8	38 10
	Doppietta	W. 0 2¾	2 1¼	1 23 13	43, 7	7 8,81
Saxony	Ducat of 1784	B. 1 2	2 5¾	2 9 8	52, 6	9 3,71
	Ducat of 1797	B. 1 2½	2 5¾	2 9 14	52, 9	9 4,34
	Augustus of 1754	W. 0 2⅝	4 6½	4 3 8	91, 2	16 1,69
	Augustus of 1784	W. 0 1¾	4 6½	4 4 12	92, 2	16 3,81
Sicily*	Ounce of 1734	W. 0 2¼	2 20½	2 18 14	61, 2	10 9,97
	Ounce of 1741	W. 0 3	2 20½	2 18 4	60, 7	10 8,91
	Ounce of 1751	W. 1 2½	2 20½	2 15 8	58, 2	10 3,60
	Double Ounce of 1758	W. 1 2	5 17	5 7 14	117,	20 8,48
Spain	Quadruple Pistole, or Doubloon, (coined before 1772)	W. 0 1½	17 8½	17 1 8	375, 3	66 5,06
	Double Pistole, (before 1772, single and half in proportion)	W. 0 1½	8 16⅓	8 12 14	187, 7	33 2,63
	Quarter Pistole, or Gold Dollar (before 1772)	W. 0 2	1 3	1 2 8	24, 2	4 3,39
	Doubloon of 1772 (Double and Single in proportion)	W. 0 2¼	17 8½	16 21 16	372,	65 10,05
	Half Pistole of 1772	W. 0 2½	2 4	2 2 10	46, 3	8 2,33
	Quarter Pistole of 1772	W. 0 3	1 3	1 2 2	23, 9	4 2,75
	Quadruple Pistole of 1801	W. 1 1	17 9	16 9 6	360, 5	63 9,62
	Double Pistole of 1801	W. 1 1	8 16½	8 4 13	180, 3	31 10,92
	Pistole of 1801	W. 1 1	4 8¼	4 2 6	90, 1	15 11,35
	Coronilla, Gold Doll. or Vintem of 1801	W. 1 2½	1 3	1 0 18	22, 8	4 0,42
Sweden	Ducat	B. 1 2	2 5	2 8 12	51, 9	9 2,22
Switzerland	Ducat of Lucerne	B. 1 2	2 5¾	2 9 8	52, 6	9 3,71
	Double Ducat of Lucerne	W. 1 0	4 11½	4 6 12	94, 1	16 7,84
	Piece of Five Ducats of Lucerne	W. 0 1	11 3	10 23 18	241, 9	42 9,74
	Ducat of Schwitz	B. 0 2	2 5	2 6 4	49, 7	8 9,55
	Ducat of St. Gall	B. 0 3	2 5¾	2 7 12	51,	9 0,31
	Ducat of Uri	B. 1 1	2 5	2 8 0	51, 4	9 1,16
	Pistole of Lucerne	W. 0 1½	4 21½	4 19 9	105, 9	18 8,91
	Pistole of Soleure	W. 0 1¾	4 22	4 19 12	106,	18 9,12
	Pistole of the Helvetic Republic of 1800	W. 0 1½	4 21½	4 19 9	105, 9	18 8,91
	(See also Basil, Bern, Geneva, St. Gall, and Zurich.)					
Treves	Ducat	B. 1 2	2 5¾	2 9 8	52, 6	9 3,71

* Much variation is found in the fineness of the Sicilian gold coins.

		Assay. car.	gr.	Weight. dwt.	gr.	Stan. Weight dwt.	gr.	mt.	Contents in Pure Gold. grains.	Value in Sterling. s.	d.
TURKEY	Sequin Fonducli of Constantinople of 1773	W. 2	2½	2	5¾	1	23	6	43, 3	7	7,94
	Sequin Fonducli of 1789	W. 2	3¼	2	5¾	1	22	16	42, 9	7	7,11
	Double Sequin Mahbub of 1773	B. 1	0	3	4¼	3	7	14	73, 1	12	11,26
	Sequin Mahbub of 1789	W. 2	3	1	12	1	7	10	28, 9	5	1,37
	Sequin of Cairo of 1773	W. 3	0½	1	15¼	1	9	16	31,	5	5,83
	Sequin of Cairo of 1789	W. 5	2½	1	15¼	1	5	6	26, 9	4	9,13
	Half Misseir (1818)	W. 5	3½	0	18¼	0	13	5	12,16	2	1,82
	Sequin Fonducli	W. 2	3	2	5	1	22	7	42, 5	7	6,26
	Rubieh	W. 2	3¼	0	12½	0	10	18	9, 9	1	9
	Yermeebeshlek	B. 0	3½	3	1¾	3	4	13	70, 3	12	5,30
TUSCANY	Ruspone	B. 1	3¾	6	17¼	7	7	8	160, 8	28	5,50
	Zecchino, or Sequin	B. 1	3¾	2	5¾	2	10	14	53, 6	9	5,83
	Ruspone of the Kingdom of Etruria	B. 1	3⅞	6	17¼	7	7	13	161,	28	5,93
UNITED STATES	*Eagle (½ and ¼ in proportion)	W. 0	0½	11	6	11	4	8	246, 1	43	6,66
VENICE	Zecchino, or Sequin, (½ and ¼ in prop.)	B. 1	3¼	2	6	2	10	10	53, 6	9	5,83
	Doppia, or Pistole	W. 0	1	4	8	4	7	0	94, 4	16	8,48
	Scudo d'oro, or Gold Crown	B. 1	3½	26	23	29	6	2	643, 6	113	10,87
	Ducato d'oro, or Gold Ducat	B. 1	3½	1	9½	1	12	6	33, 3	5	10,72
	Osella d'oro	B. 1	3½	8	23½	9	17	18	214, 5	37	11,55
WEST INDIES	*(See* Vol. I.)										
WIRTEMBERG	Carolin	W. 3	2	6	3½	5	4	0	113, 7	20	1,47
	Ducat	B. 1	2	2	5	2	8	12	51, 9	9	2,22
WURTZBURG	Ducat	B. 1	2	2	5¾	2	9	8	52, 6	9	3,71
ZURICH	Ducat (Double and ½ Ducat in prop.)	B. 1	2	2	5¾	2	9	8	52, 6	9	3,71

EAST INDIES.

EAST INDIA	Mohur of Shah Allum (1770)	B. 1	2¼	7	22¼	8	11	15	186, 8	33	0,72
	Mohur of the same	B. 1	2¾	7	23	8	13	13	188, 5	33	4,33
	Mohur, Half, (1787) ¼ in proportion	B. 1	2½	3	23½	4	6	10	94,	16	7,64
	Mohur Sicca of Bengal, dated 19th Sun.	B. 1	3⅜	7	23	8	15	0	189, 8	33	7,09
	Mohur of Bombay, old, still in circulation	B. 0	3½	7	10⅓	7	17	8	170,	30	1,04
	Mohur of the Dutch East India Company (1783)	W. 3	3¼	10	2	8	8	0	183, 4	32	5,50
	Mohur of ditto (1797)	W. 4	1	9	20	7	22	8	174, 5	30	10,60
	Mohur, Half ditto (1801)	W. 3	1¼	5	3½	4	18	18	96, 2	17	0,30
	Rupee, Tippoo's	W. 1	2	8	20½	8	6	0	181, 5	32	1,46
	†Rupee, Zodiac	B. 1	3¾	7	0	7	14	16	167, 6	29	7,9
	Rupee, Bombay (1818)	B. 0	0½	7	11	7	11	13	164, 7	29	1,78
	Rupee of Madras (1818)	Stand.		7	12	7	12	0	165,	29	2,42
	Pagoda, Star	W. 3	0	2	4¾	1	21	11	41, 8	7	4,77
	Pagoda, with a crescent and three figures	W. 1	3¼	2	5¼	2	0	18	44, 8	7	11,14
	Pagoda, with a crescent and one figure	W. 2	1¾	2	4	1	22	5	42, 4	7	6,04
	Pagoda, Arcot, old	W. 3	2	2	4½	1	20	4	40, 5	7	2,01
	Pagoda, Arcot, new	W. 7	1	2	4½	1	11	4	32, 4	5	8,59
	Pagoda, Onore	W. 1	3¼	2	4½	2	0	4	44, 2	7	9,87
	Pagoda, Mangalore	W. 1	2½	2	4½	2	0	12	44, 6	7	10,72
	Pagoda, Pondicherry	W. 5	0	2	4½	1	16	6	37, 2	6	7
	Pagoda, Hyderee Hoon	W. 2	1¼	2	4¾	1	23	4	43, 3	7	7,96
	Pagoda, Sultanee Hoon	W. 0	3¼	2	4¾	2	2	16	46, 6	8	2,97
	Saik Sai, a Mahratta coin	W. 1	3⅞	6	22½	6	7	16	139, 2	24	7,63
	Tippoo's Faruki	W. 1	2	2	4½	2	0	18	44, 8	7	11,14
	Japan Copang, old	W. 1	2	11	9	10	14	8	233, 2	41	3,27
	Japan Copang, new	W. 6	0	8	9¾	6	2	14	134, 5	23	9,65

* This value of the American Eagle is taken from Average Assays of the Coins of twelve years.

† These Rupees are stamped with the Signs of the Zodiac: they are now very scarce, being only preserved as objects of curiosity.

NEW TABLE OF SILVER COINS.

TABLE VI.

Containing the Assays, Weights, and Values of the principal Silver Coins of all Countries, computed at the rate of 5s. 2d. per Ounce Standard, from Assays made both at the London and Paris Mints, as stated in Page 157.

		Assay.		Weight.		Stan. Weight			Contents in pure Silver.	Value in Sterling.	
			oz. dwt.	dwt.	gr.	dwt.	gr.	mi.	grains.	s.	d.
Aix la Chapelle	Rathsprœsentger	W.	4 2	4	1½	2	13	9	56, 9	0	7,94
	Double ditto	W.	2 15	6	23¼	5	5	16	116, 3	1	4,24
America	*(See Portugal, Spain, & United States.)*										
Austria	Rixdollar, *Constitution*, before 1753	W.	0 11	18	11½	17	13	10	390,	4	6,45
	Rixdollar, *Convention*, coined since 1753	W.	1 6	18	1	15	22	4	353, 7	4	1,39
	Rixdollar Ditto, of Francis II. 1800	W.	1 5	18	1	16	0	4	355, 5	4	1,64
	Rixdollar of the Kingdom of Hungary	W.	1 2	18	1	16	6	1	360, 9	4	2,39
	Half Rixdollar, or Florin, *Convention*	W.	1 3	9	0½	8	2	1	179, 6	2	1,07
	Copfstuck, or 20 Creutzer Piece	W.	4 3	4	6½	2	16	3	59, 4	0	8,29
	17 Creutzer Piece	W.	4 8	4	0	2	9	18	53, 5	0	7,47
	Halbe Copf, or 10 Creutzer Piece	W.	5 5	2	11	1	7	1	28, 8	0	4,01
Baden	Rixdollar	W.	1 4	18	2	16	3	1	358, 1	4	2
Basil	Patagon, or Ecu, old	W.	0 14	18	4	17	0	10	377, 9	4	4,76
	Thaler, or Rixdollar, of 1763	W.	1 2	14	22	13	10	10	298, 4	3	5,66
	Patagon, or Ecu, of 1795, (Double, &c. in proportion	W.	1 0½	16	14	15	1	5	334, 3	3	10,68
	Piece of 10 Batzen	W.	2 2	5	13½	4	12	4	100, 1	1	1,97
Bavaria	Rixdollar *Convention* of 1780	W.	1 6	18	1	15	22	4	358, 7	4	1,39
	Rixdollar of 1800, (½ in proportion)	W.	1 4½	17	12	15	13	13	345, 6	4	0,25
	Copstuck	W.	4 3	4	6½	2	16	3	59, 4	0	8,29
Bern	Patagon, or Crown, (½ in proportion)	W.	0 7	18	22	18	7	14	406, 7	4	8,79
	Piece of 10 Batzen	W.	1 2	5	3	4	14	17	102, 5	1	2,31
	Piece of 5 Batzen	W.	2 2	2	15	2	3	2	47, 2	0	6,59
Bologna	*(See Rome)*										
Brandenburg	*(See Prussia.)*										
Bremen	Piece of 48 Grotes	W.	2 2	11	0	8	22	1	198,	2	3,64
Brunswick	Rixdollar, *Convention*	W.	1 3	18	1	16	4	4	359, 2	4	2,15
	Half Rixdollar	W.	1 3	9	0½	8	2	2	179, 6	2	1,07
	Gulden, or Piece of ⅔, fine, of 1764	B.	0 16	8	10½	9	1	1	200, 8	2	4,03
	Gulden, common, of 1764	W.	1 2	9	0	8	2	10	180,	2	1,13
	Gulden, ditto, of 1795	W.	2 2	11	1½	8	23	7	199, 1	2	3,80
	Half Gulden, or Piece of ⅓, of 1764	W.	1 2	4	12	4	1	5	90,	1	0,56
Cassel	*(See Hesse Cassel.)*										
Cologne	Rixdollar, old	W.	0 15½	18	1	16	18	15	372, 5	4	4,01
	Rixdollar, *Constitution*	W.	0 7	18	19	18	4	14	404,	4	8,41
	Rixdollar, *Convention*	W.	1 6	18	1	15	22	4	353, 7	4	1,39
Constantinople	*(See Turkey.)*										

		Assay.		Weight.		Stan. Weight			Contents in pure Silver.	Value in Sterling.	
		oz.	dwt.	dwt.	gr.	dwt.	gr.	mi.	grains.	s.	d.
DENMARK	Ryksdaler, old, of 6 Marks Danish	W. 1	2	17	5½	15	12	5	344, 4	4	0,92
	Crone, or old piece of 4 Marks	W. 3	1	14	1	10	4	7	226	2	7,55
	Crone, or Crown, of 1747	W. 1	2	11	15½	10	10	16	232, 9	2	8,52
	Ryksdaler, specie, of 1798	W. 0	13	18	14	17	11	17	388, 4	4	6,23
	New Piece of 4 Marks	W. 0	12	12	9	11	16	14	259, 8	3	0,27
	Half Ryksdaler	W. 0	13	9	7	8	17	8	194, 2	2	3,11
	Mark, specie, or ⅙ Ryksdaler	W. 3	1	4	0	2	21	12	64, 4	0	7,59
	Rixdollar, specie of Sleswig and Holstein (pieces of ⅔ and ⅓ in prop.)	W. 0	12	18	13	17	12	6	389, 4	4	6,37
	Piece of 24 Skillings	W. 4	7	5	2½	3	2	10	68, 9	0	9,62
EAST INDIES	*(See* p. 170.)										
ENGLAND	Crown *(old)*	Stand.		19	8½	19	8	10	429, 7	5	0
	Half-crown	Stand.		9	16¼	9	16	5	214, 8	2	6
	Shilling	Stand.		3	21	3	21	0	85, 9	1	0
	Sixpence	Stand.		1	22½	1	22	10	42, 9	0	6
	Crown, *(new)*	Stand.		18	4¼	18	4	7	403, 6	4	8,36
	Half-crown	Stand.		9	2	9	2	4	201, 8	2	4,18
	Shilling	Stand.		3	15¼	3	15	6	80, 7	0	11,27
	Sixpence	Stand.		1	19¾	1	19	14	40, 3	0	5,63
FLORENCE	*(See Tuscany.)*										
FRANCE	Ecu of 6 Livres	W. 0	7	18	18	18	7	16	403, 1	4	8,28
	Demi Ecu	W. 0	7	9	9	9	1	18	201, 5	2	4,13
	Piece of 24 Sous (divisions in prop.)	W. 0	7	3	20	3	16	19	83, 4	0	11,64
	Piece of 30 Sous (½ in proportion)	W. 3	8	6	12	4	12	4	100, 2	1	1,99
	Piece of 5 Francs of the Convention	W. 0	10½	16	0	15	5	14	338, 3	3	11,24
	Piece of 5 Francs (Napoleon) of 1808	W. 0	7	16	1	15	12	4	344, 9	4	0,16
	Piece of 2 Francs of 1808	W. 0	7	6	11	6	6	2	138, 8	1	7,38
	Franc of 1809	W. 0	7	3	5½	3	3	1	69, 4	0	9,69
	Demi Franc	W. 0	8½	1	15	4	13	6	34, 7	0	4,84
	Franc (Louis) of 1818, same as Franc of 1809										
FRANCFORT ON THE MAINE	Rixdollar, Convention of 1772	W. 1	0½	18	1	16	8	16	363, 5	4	2,75
	Rixdollar, Ditto of 1796	W. 1	2	18	1	16	6	0	360, 8	4	2,38
GENEVA	Patagon	W. 1	0	17	9	15	19	8	351,	4	1,03
	Piece of 21 Sous	W. 2	3½	3	1¾	2	11	5	54, 8	0	7,65
	Piece of 12 Florins 9 Sous, called Genevoise, or Gros Ecu, (1794)	W. 0	13	19	8	18	4	16	404,	4	8,41
	Ditto of 1796, (½ in proportion)	W. 0	14	19	15	18	9	6	408, 2	4	9
	Piece of 15 Sous of 1794	W. 2	6	2	1¼	1	15	1	36, 1	0	5,04
GENOA	Scudo della croce	B. 0	7	24	16¾	25	11	8	565, 5	6	6,96
	Scudo di S. Giambatista, of 5 Lire	W. 0	2	13	8½	13	5	12	293, 8	3	5,02
	Double Madonnina, (single and half in proportion	W. 1	2	5	19½	5	5	12	116, 2	1	4,22
	Scudo, of 8 Lire, of 1796, (½, ¼, &c. in proportion)	W. 0	8	21	9	20	14	10	457, 4	5	3,87
	Scudo of the Ligurian Republic	W. 0	9½	21	9	20	11	2	454, 3	5	3,43
HAMBURGH	Rixdollar specie	W. 0	10	18	18	17	21	12	397, 5	4	7,49
	Double Mark, or 32 Schillings Piece, single in proportion)	W. 2	3	11	18	9	11	8	210, 3	2	5,36
	Piece of 8 Schillings	W. 3	12	3	8¼	2	6	4	50, 1	0	6,99
	Piece of 4 Schillings	W. 4	6	2	2	1	6	12	28, 3	0	3,95
HANOVER	Rixdollar, *Constitution*	W. 0	9	18	19	18	0	14	400, 3	4	7,39

		Assay.		Weight.		Stan. Weight			Contents in pure Silver.	Value in Sterling.	
			oz. dwt.	dwt.	gr.	dwt.	gr.	mi.	grains.	s.	d.
HANOVER	Florin, or Piece of $\frac{2}{3}$, fine	B.	0 16	8	10	9	0	10	200, 3	2	3,96
	Half Florin, or Piece of $\frac{1}{3}$, ditto	B.	0 16	4	4	4	11	4	99, 2	1	1,85
	Quarter, or Piece of 6 good Groschen, do.	B.	0 16	2	1	2	4	10	48, 6	0	6,78
	Florin, or Piece of $\frac{2}{3}$, base	W.	2 1	11	$0\frac{3}{4}$	8	23	15	199, 6	2	3,87
HESSE CASSEL	Rixdollar, *Convention*	W.	1 6	18	1	15	22	6	353,	4	1,39
	Florin, or Piece of $\frac{2}{3}$, ($\frac{1}{2}$ in proportion)	W.	1 6	9	$0\frac{1}{2}$	7	23	3	176, 8	2	0,68
	Thaler, or Rixdollar of account of 1778	W.	2 3	15	$2\frac{1}{2}$	12	4	3	270, 3	3	1,74
	Thaler of 1789	W.	0 $10\frac{1}{2}$	12	$7\frac{3}{4}$	11	17	5	259, 7	3	0,26
	Ecu, *Convention* (1815)	W.	1 6	17	$23\frac{3}{4}$	15	21	2	349, 3	4	0,77
	Six Bon Gros	W.	4 10	8	0	2	23	0	65, 1	0	9,80
	Bon Gros	W.	6 14	1	4	0	11	5	10, 3	0	1,43
HOLLAND	Ducatoon	B.	0 3	20	22	21	4	15	471, 6	5	5,85
	Piece of 3 Florins	W.	0 2	20	7	20	2	12	446, 4	5	2,33
	Piece of 3 Florins of Batavia	W.	0 $5\frac{1}{2}$	20	3	19	15	0	435, 7	5	0,84
	Rixdollar (the Assay varies)	W.	0 16	18	6	16	20	8	375, 9	4	4,99
	Daalder, or 30 Stiver Piece	W.	0 10	10	6	9	18	18	217, 3	2	6,34
	Half Rixdollar	W.	0 16	9	0	8	8	8	185, 4	2	1,89
	Florin, or Guilder, ($\frac{1}{2}$ in proportion)	W.	0 $4\frac{1}{2}$	6	18	6	14	14	146, 8	1	8,49
	12 Stiver Piece	W.	0 $16\frac{1}{2}$	4	12	4	3	18	92, 4	1	0,90
	Sesthalf, or $5\frac{1}{2}$ Stiver Piece	W.	4 15	3	0	1	17	4	38, 1	0	5,32
	8 Stiver Piece	W.	0 17	3	0	2	18	8	61, 5	0	8,58
	Florin of Batavia	W.	0 $5\frac{1}{2}$	6	13	6	9	2	141, 6	1	7,77
	Rixdollar, or 50 Stiver Piece of the Kingdom of Holland	W.	0 $5\frac{1}{2}$	17	0	16	13	18	367, 9	4	3,37
HUNGARY	*(See Austria.)*										
JAPAN	*(See East Indies*, p. 170.)										
LEGHORN	*(See Tuscany.)*										
LEIPSIC	*(See Saxony.)*										
LIEGE	Ducatoon of 1671	B.	0 2	20	$18\frac{1}{2}$	20	22	18	465, 3	5	4,97
	Patagon, old	W.	0 14	17	$20\frac{3}{4}$	16	17	14	371, 6	4	3,89
	Patagon of 1792	W.	0 17	17	15	16	6	11	361, 3	4	2,45
	Escalin of 1771	W.	3 17	3	$3\frac{1}{2}$	2	1	6	45, 6	0	6,36
	Escalin of 1792	W.	4 2	3	1	1	22	0	42, 6	0	5,94
LORRAINE	Ecu, called Leopold, (1704)	W.	0 3	17	11	17	5	6	382, 3	4	5,38
	Ecu (1710)	W.	0 4	19	$14\frac{1}{2}$	19	5	10	426, 9	4	11,61
LUBEC	Rixdollar, specie	W.	0 13	18	18	17	15	12	391, 9	4	6,72
	Double Mark	W.	2 3	11	18	9	11	8	210, 3	2	5,36
	Mark	W.	2 3	5	21	4	17	14	105, 1	1	2,67
LUCCA	Scudo	W.	0 3	17	0	16	18	10	372, 3	4	3,98
	Mezzo, or $\frac{1}{2}$ Scudo	W.	0 3	8	3	8	0	7	177, 9	2	0,84
	Terzo, or $\frac{1}{3}$ Scudo	W.	0 3	5	19	5	17	2	126, 8	1	5,70
	Quinto, or $\frac{1}{5}$ Scudo	W.	0 3	3	5	3	3	19	70, 3	0	9,81
	Barbone	W.	3 3	1	$20\frac{1}{4}$	1	7	14	29, 3	0	4,09
LUNEBURG	*(See Hanover.)*										
MALTA	Ounce of 30 Tari of Emmanuel Pinto	W.	2 5	19	$1\frac{1}{2}$	15	4	14	337, 4	3	11,11
	Ounce of Emmanuel de Rohan ($\frac{1}{2}$ in prop.)	W.	1 3	19	$1\frac{1}{2}$	17	2	2	379, 3	4	4,96
	Scudo of the same, (Double in prop.)	W.	2 5	7	19	6	5	0	137, 9	1	7,25
	Ounce of Ferdinand Hompesch	W.	1 2	19	$1\frac{1}{2}$	17	4	3	381, 3	4	5,24
	2 Tari Piece	W.	2 19	1	2	0	19	2	17, 7	0	2,47
MANHEIM	Rixdollar, fine	B.	0 16	16	16	17	20	6	396, 7	4	7,39
	Florin, or Piece of $\frac{2}{3}$, fine	B.	0 16	8	8	8	22	8	198, 3	2	3,69
	Rixdollar, *Convention*	W.	1 3	18	1	16	4	3	359, 0	4	2,13

		Assay.		Weight.		Stan. Weight			Contents in pure Silver.	Value in Sterling.	
			oz. dwt.	dwt.	gr.	dw.	gr.	mi.	grains.	s.	d.
Mecklenburg ..	Florin, or Piece of $\frac{2}{3}$	W.	2 2	11	1½	8	23	5	199, 1	2	3,80
Mentz	Rixdollar	W.	1 2	18	1	16	6	0	360, 8	4	2,38
	Copstuck	W.	4 2	4	6½	2	16	13	59, 8	0	8,35
Milan	Scudo of 6 Lire ($\frac{1}{2}$ in proportion)	W.	0 7	14	20¾	14	9	10	319, 6	3	8,62
	Lira, new	W.	4 10	4	0	2	9	0	52, 8	0	7,37
	Lira, old	W.	0 3	2	10	2	9	4	52, 9	0	7,38
	Piece of 30 Soldi, Francis II.	W.	2 18	4	17	3	11	8	77, 2	0	10,78
	Scudo of the Cisalpine Republic	W.	0 7	14	21½	14	10	4	320, 2	3	8,71
	Piece of 30 Soldi of ditto	W.	2 18	4	17	3	11	8	77, 2	0	10,78
Modena	Scudo of 15 Lire, 1739 (double, &c. in pro.)	W.	0 14	18	12½	17	8	9	385, 2	4	5,78
	Scudo of 5 Lire, of 1782	W.	0 3	5	19	5	17	2	126, 8	1	5,70
	Scudo of 1796	W.	3 3	18	1¾	12	22	12	287, 4	3	4,13
Naples	Ducat, old ($\frac{1}{2}$ in proportion)	W.	0 4	14	0	13	17	18	305, 2	3	6,61
	Piece of 12 Carlini (before 1784)	W.	0 7	16	7	15	18	12	350, 3	4	0,91
	Ducat, new ($\frac{1}{2}$ in proportion)	W.	1 0	14	15	13	7	8	295, 4	3	5,24
	Piece of 12 Carlini of 1791	W.	1 0	17	15	16	0	18	356,	4	1,71
	Ditto of 1796	W.	1 2	17	16¾	15	22	12	353, 9	4	1,41
	Ditto of the Neapolitan Republic (1799)	W.	1 2	17	16¾	15	22	12	353, 9	4	1,41
	Ditto of 1805 ($\frac{1}{2}$ in proportion)	W.	1 2	17	18¾	15	23	18	355, 2	4	1,60
	Ditto of 10 Carlini (1818)	W.	1 2	14	18	13	7	0	295, 1	3	5,20
Netherlands ..	Ducatoon, old	B.	0 4	21	0	21	9	0	474, 6	5	6,27
	Ducatoon of Maria Theresa	W.	0 14	21	10	20	1	12	445, 5	5	2,20
	Crown ($\frac{1}{2}$, &c. in proportion)	W.	0 14	19	0	17	19	4	395, 2	4	7,18
	Escalin (Double in proportion)	W.	4 4	3	4¼	1	23	8	43, 8	0	6,11
	Plaquette	W.	5 8	1	18	0	21	12	20,	0	2,79
	5 Stiver Piece	W.	6 3	3	4	1	9	18	31, 3	0	4,37
	Silver Lion of 1790	W.	0 13	21	3	19	21	6	441, 5	5	1,65
	Florin of 1790	W.	0 14	5	23½	5	14	9	124, 3	1	5,35
	Piece of 10 Stivers of 1790	W.	0 16	3	0	2	18	6	61, 8	0	8,62
	Florin of 1816	W.	0 7½	6	22	6	16	6	148, 4	1	8,72
	Half Florin (with Division in prop.)	W.	4 5½	5	11	3	9	2	75,	0	10,46
Neufchatel	Piece of 21 Batzen	W.	1 11	9	20	8	11	0	187, 8	2	2,22
	Piece of 10½ Batzen	W.	1 11	4	22	4	5	10	93, 9	1	1,11
Nuremberg	Rixdollar, *Constitution*	W.	0 8	18	19	18	2	15	402, 2	4	8,16
	Rixdollar, *Convention*	W.	1 3	18	1	16	4	2	359, 0	4	2,13
	Copstuck	W.	4 2	4	6½	2	16	13	59, 8	0	8,35
Parma	Ducat of 1784	W.	0 9	16	11	15	18	18	350, 6	4	0,95
	Ducat of 1796 ($\frac{1}{2}$ in proportion)	W.	0 5½	16	12¾	16	2	18	357, 9	4	1,97
	Piece of 3 Lire	W.	1 4	4	14	4	2	2	90, 7	1	0,66
Persia	*(See East Indies,* p. 170.*)*										
Piedmont	Scudo (1690)	W.	0 3	17	9¼	17	3	12	380, 7	4	5,16
	Scudo (1733)	W.	0 3	19	3	18	20	16	418, 8	4	10,48
	Scudo (1755,) $\frac{1}{2}$, &c. in proportion	W.	0 5½	22	14	22	0	10	488, 9	5	8,26
	Scudo, (1770,) $\frac{1}{2}$ and $\frac{1}{4}$ in proportion	W.	0 5	22	14	22	1	16	490, 0	5	8,42
	Piece of 2 Lire (1714)	W.	0 4½	7	20½	7	16	13	170, 8	1	11,85
	5 Franc Piece (1801)	W.	0 8	16	1½	15	11	12	343, 7	3	11,99
Poland	Rixdollar, old	W.	1 2	18	1	16	6	0	360, 8	4	2,38
	Rixdollar, new (1794)	W.	2 17	15	10½	11	11	6	254, 3	2	11,51
	Florin, or Gulden	W.	4 2	6	0	3	18	16	84,	0	11,72
Portugal	New Crusado (1690)	W.	0 4	11	0	10	19	0	239, 2	2	9,40
	Ditto (1718)	W.	0 6½	9	8	9	1	0	200, 2	2	3,95
	Ditto (1795)	W.	0 7	9	9	9	1	18	201, 6	2	4,15

		Assay.		Weight.		Stan. Weight.			Contents in pure Silver.	Value in Sterling.	
		oz.	dwt.	dw.	gr.	dwt.	gr.	mi.	grains.	s.	d.
Portugal	Doze Vintems, or Piece of 240 Rees (1799)	W. 0	7	4	16	4	12	10	100, 4	1	2,01
	Testoon (1799)	W. 0	7	2	0½	1	22	18	43, 4	0	6,06
	New Crusado (1802)	W. 0	9	9	9	8	23	16	199, 7	2	3,88
	Ditto (1809)	W. 0	4	9	3	8	23	0	198, 2	2	4,67
	Seis Vintems, or Piece of 120 Rees (1802)	W. 0	9	2	4½	2	2	8	46, 6	0	6,50
	Testoon (1802)	W. 0	9	2	0	1	22	0	42, 5	0	5,93
	Tres Vintems, or Piece of 60 Rees (1802)	W. 0	9	1	2¼	1	1	4	23, 3	0	3,25
	Half Testoon (1802)	W. 0	9	0	23	0	22	0	20, 4	0	2,84
Portuguese Colonies	Pataca of Brazil, old, of 640 Rees	W. 0	2	12	4⅔	12	2	2	268, 3	3	1,46
	Ditto of 600 Rees (1755)	W. 0	4	11	7½	11	2	12	246, 6	2	10,43
	Ditto of 640 Rees (1768)	W. 0	4½	11	9¾	11	8	14	252, 3	2	11,23
	Ditto of 640 Rees (1801) ½ and ¼ in prop.	W. 0	7	12	4¾	11	19	10	262, 2	3	0,61
	Piece of 12 Macutas, of Portuguese Africa	W. 0	7	11	7½	10	22	18	243, 2	2	9,96
	Ditto of 8 ditto	W. 0	9	7	12	7	4	14	159, 8	1	10,31
	Ditto of 6 ditto	W. 0	9	5	13	5	7	12	118,	1	4,47
	Ditto of 4 ditto	W. 0	9	3	16	3	12	8	78, 1	0	10,90
Prussia	Florin, old, of the Elector of Brandenburg	W. 2	2	11	9⅓	9	5	11	204, 9	2	4,61
	*Rixdollar, Prussian currency (½ in prop.)	W. 2	5	14	6½	11	9	0	252, 6	2	11,27
	Rixdollar, *Convention*	W. 1	3	18	1	16	4	2	359,	4	2,13
	Florin, or Piece of ⅔	W. 2	3	11	2	8	22	8	198, 4	2	3,70
	Florin of Silesia	W. 2	2	9	11	7	16	0	170, 3	1	11,78
	Drittel, or Piece of 8 good Groschen	W. 3	3	5	8¾	3	20	4	85, 3	0	11,91
	Piece of 4 Groschen	W. 5	0	3	9	1	20	10	41, 2	0	5,75
	Piece of 6 Groschen	W. 2	8	3	14	2	19	6	62, 3	0	8,69
	Rixdollar, old, of Bareuth	W. 2	4	12	13	10	1	6	223, 3	2	7,18
	Piece of ⅔ ditto	W. 2	4	7	15⅓	6	2	18	135, 9	1	6,97
	Piece of 30 Creutzers ditto	W. 2	2	4	2½	3	7	16	73, 8	0	10,30
	Rixdollar, old, of Anspach	W. 2	3	14	0	11	6	18	250, 6	2	10,99
	Piece of ⅔ ditto	W. 2	4	8	21	7	2	14	158,	1	10,06
	Rixdollar of Anspach and Bareuth, *Convention*	W. 1	3	18	1	16	4	2	359,	4	2,22
Ragusa	Tallaro, or Ragusina (1759)	W. 4	2	18	7½	11	13	2	256, 4	2	11,80
	Ditto (1774)	W. 4	4	18	8½	11	9	16	253, 3	2	11,37
	Ditto (1794)	W. 3	19	18	17¼	12	1	6	267, 7	3	1,38
	Ducat (1797)	W. 5	11	8	17¾	4	8	16	97,	1	1,54
Ratisbon	Rixdollar, specie (½, &c. in prop.)	W. 1	3	18	1	16	4	2	359, 2	4	1,53
Rome	Scudo, or Crown, (before 1753)	W. 0	4	20	11	20	2	2	446,	5	2,27
	Testone, old	W. 0	4½	5	21	5	18	2	127, 8	1	5,84
	Paolo, old	W. 0	4½	1	22¾	1	21	16	42, 4	0	5,92
	Scudo, or Crown (coined since 1753)	W. 0	4	17	1	16	17	13	371, 5	4	3,87
	Mezzo Scudo, or Half Crown	W. 0	4	8	12½	8	8	16	185, 7	2	1,93
	Testone (1770)	W. 0	3½	5	2	5	0	0	111, 1	1	3,51
	Ditto (1785)	W. 0	5	5	2	4	23	4	110, 3	1	3,40
	Paolo (1785)	W. 0	4	1	17	1	16	4	37, 2	0	5,19
	Grosso, or Half Paolo (1785)	W. 0	5	0	20½	0	20	0	18, 5	0	2,58
	Papello (1775)	W. 0	4½	3	8¼	3	6	12	72, 7	0	10,15
	Scudo of the Roman Republic (1799)	W. 0	6	17	1	16	13	18	368, 1	4	3,40
	Scudo of Bologna (Pius VI.)	W. 0	3	17	1	16	19	8	373, 2	4	4,11
	Testone ditto	W. 0	3	5	2	5	0	6	111, 5	1	3,56

* The Prussian Coins having been debased at different periods vary in their reports.

		Assay.		Weight.		Stan. Weight			Contents in pure Silver	Value in Sterling.	
		oz.	dwt.	dwt.	gr.	dwt.	gr.	mi.	grains.	s.	d.
Rome	Scudo of the City of Bologna	W. 1	0	19	0	17	6	18	383, 9	4	5,09
	Ditto of Pius VII. (1800)	W. 0	1	17	0¼	16	21	4	371, 5	4	3,78
Russia	Ruble of Peter the Great	W. 2	7	18	1	14	1	8	312, 1	3	7,58
	Ditto of Catherine I. (1725)	W. 2	4½	17	11	13	23	0	309, 9	3	7,27
	Ditto of Peter II. (1727)	W. 2	12	18	5¾	13	23	4	310,	3	7,28
	Ditto of Anne (1734)	W. 1	11	16	14½	14	6	16	317, 2	3	8,29
	Ditto of Elizabeth (1750)	W. 1	7	16	12	14	11	16	321, 8	3	8,93
	Ditto of Peter III. (1762)	W. 2	2	15	10	12	12	0	277, 5	3	2,75
	Ditto of Catherine II. (1780)	W. 2	4	15	12	12	10	6	275, 9	3	2,52
	Ditto of Paul (1799)	W. 0	14	13	12	12	15	10	280, 8	3	3,21
	Ditto of Alexander (1802)	W. 0	13	13	1½	17	7	2	273,	3	2,12
	Ditto of ditto (1805)	W. 0	16	13	12	12	12	12	278, 1	3	2,83
	Poltin, or ½ Ruble of Anne	W. 1	10	7	21	6	19	8	151, 2	1	9,11
	Ditto of Elizabeth	W. 1	8	8	2	7	1	10	156, 8	1	9,89
	Ditto of Catherine II.	W. 2	4	7	18	6	5	2	137, 9	1	7,25
	Ditto of Paul	W. 0	15	6	18	6	7	2	139, 7	1	7,50
	Ditto of Alexander (1804)	W. 0	14	6	13½	6	3	10	136, 5	1	7,06
	Polpoltin, or ¼ Ruble, old	W. 2	6	4	1	3	4	18	71, 1	0	9,92
	Ditto of Paul	W. 0	18½	3	7	3	0	8	67,	0	9,35
	Ditto of Alexander (1802)	W. 0	13½	3	9½	3	4	10	70, 3	0	9,88
	20 Copeck Piece (1767)	W. 2	2	3	10¾	2	19	0	62, 6	0	8,74
	Ditto (1781)	W. 2	2	3	3	2	12	18	56, 2	0	7,84
	15 Copeck Piece (1778)	W. 2	2	2	6	1	19	18	40, 5	0	5,65
	10 Copeck Piece	W. 2	6	2	1	1	14	16	35, 9	0	5,11
	Ditto (1798)	W. 0	14½	1	9	1	6	16	28, 5	0	3,97
	Ditto (1802)	W. 0	13	1	8½	1	6	11	28, 3	0	3,95
	5 Copeck Piece (1801)	W. 0	13½	0	16½	0	15	10	15, 3	0	2,13
St. Gall	Rixdollar (½ in proportion)	W. 1	4	18	1	16	2	4	357, 3	4	1,98
	24 Creutzer Piece	W. 4	2	4	7¼	2	17	2	60, 2	0	8,40
Saltzburg	Rixdollar, *Convention*	W. 1	2	18	1	16	6	0	360, 8	4	2,33
	24 Creutzer Piece	W. 4	3	4	6½	2	16	4	59, 4	0	8,29
Sardinia	Scudo, or Crown, (½ and ¼ in prop.)	W. 0	7	15	2½	14	15	0	324, 7	3	9,34
Saxony	Rixdollar, *Convention* (½ and ¼ in prop.)	W. 1	3	18	0	16	3	4	358, 2	4	2,01
	Old Rixdollar of Dresden	W. 0	9½	18	19	17	23	14	399, 3	4	7,75
	Ditto of Leipsic	W. 2	0	18	19	15	9	16	342,	3	11,75
	Piece of 16 Groschen of Leipsic	W. 2	2	9	9½	7	14	16	169, 1	1	11,61
	Piece of 8 Groschen	W. 2	5	4	20	3	20	8	85, 6	0	11,95
	Rixdollar current of Saxe Gotha	W. 4	4½	18	1	11	4	2	248, 1	2	10,64
	⅙ Thaler of 1804	W. 4	11	3	11	2	0	19	45, 3	0	6,32
	Ditto of 1808	W. 4	11½	3	5½	1	21	8	42, 1	0	5,87
	Ditto of Jerome Buonaparte of 1809	W. 5	4	3	17	1	23	6	43, 7	0	6,10
Sicily	Scudo (½ in proportion)	W. 1	4	17	14	15	16	6	348, 2	4	0,62
	Piece of 40 Grains	W. 1	2	5	21	5	7	2	117, 5	1	4,40
	Ditto of 20 Grains	W. 1	5	3	0	2	15	18	59, 1	0	8,25
Sierra Leone Company	Piece of 10 Macutas	W. 1	6	16	21	14	21	12	330, 8	3	10,19
	Ditto of 5 Macutas	W. 1	6	8	13	7	12	18	167, 4	1	11,37
	Ditto of 2 Macutas	W. 1	6	3	7½	2	22	6	65,	0	9,07
	Ditto of 1 Macuta	W. 1	6	1	16	1	11	8	32, 5	0	4,53
Spain	Dollar, old Mexican square (1747)	W. 0	4½	17	7	16	22	10	376, 1	4	4,51
	Half ditto	W. 0	4½	8	15½	8	11	5	188,	2	1,25
	Dollar, old, called Sevillan (1731)	W. 0	4½	17	7	16	22	10	376, 1	4	4,51

		Assay.		Weight.		Stan. Weight.			Contents in pure Silver.	Value in Sterling.	
		oz.	dwt.	dwt.	gr.	dwt.	gr.	mi.	grains.	s.	d.
Spain	Old Mexican Peceta of two Mexican Reals (1736)	W. 0	4½	4	7¼	4	5	2	93, 6	1	1,07
	Real of Mexican Plate (1746)	W. 0	4½	2	3½	2	2	11	46, 8	0	6,53
	Dollar, Mexican, with globes and pillars, (1765)	W. 0	4½	17	8½	17	0	0	377, 4	4	4,79
	Peceta of two Reals of Plate (1721)	W. 1	7	3	16½	3	5	14	71, 9	0	10,04
	Real of Plate (1721)	W. 1	7	1	20¼	1	14	19	35, 9	0	5,01
	Dollar,* of late coinage	W. 0	8	17	8	16	17	0	370, 9	4	3,79
	Half Dollar, ditto	W. 0	8	8	16	8	8	10	185, 4	2	1,88
	Mexican Peceta (1774)	W. 0	8	4	7½	4	3	16	92, 3	1	0,88
	Real of Mexican Plate (1775)	W. 0	8	2	3¾	2	1	20	46, 1	0	6,43
	Peceta Provincial of 2 Reals of new plate (1775)	W. 1	9½	3	18	3	6	0	72, 2	0	10,08
	Real of new plate (1795)	W. 1	9½	1	21	1	15	0	36, 1	0	5,04
Sweden	Rixdollar (1762)	W. 0	12	18	20	17	19	10	395, 5	4	7,22
	Rixdollar of late coinage	W. 0	14⅓	18	17	17	12	0	388, 5	4	6,28
	Double Plott, or Piece of ⅔	W. 0	14⅓	12	12	11	16	12	259, 6	3	0,25
	Single Plott, or Piece of ⅓	W. 0	14⅓	6	6	5	20	6	129, 8	1	6,12
	Piece of 8 Skillings	W. 2	18	3	21½	2	21	2	63, 8	0	8,90
	Ditto of 4 Skillings	W. 5	2	2	15	1	14	0	31, 5	0	4,95
Switzerland	Ecu, or Rixdollar of Lucerne, ½, &c. in proportion (1715)	W. 0	14½	17	8½	16	5	8	360, 1	4	2,28
	Old Gulden, or Florin of Lucerne (1714)	W. 1	19	8	14½	7	2	8	157, 5	1	9,99
	Ecu of 40 Batzen of Lucerne (1796)	W. 0	5	19	0	18	13	14	412, 3	4	9,57
	Half Ditto	W. 1	2	9	20	8	20	12	196, 7	2	3,46
	Florin, or Piece of 40 Schillings of Lucerne (1793)	W. 1	5	4	22	4	8	14	96, 8	1	1,51
	Half Florin of Lucerne	W. 2	2	2	15	2	3	0	47, 3	0	6,60
	Piece of 10 Batzen (1782)	W. 1	12	4	20½	4	3	14	92, 2	1	0,68
	Quarter Rixdollar of Friburg	W. 2	19	6	20¾	5	0	18	111, 9	1	3,62
	Piece of ⅛ Rixdollar of Ditto	W. 3	0	3	7½	2	10	0	53, 6	0	7,48
	Piece of 20 Batzen of Soleure	W. 1	2	9	20	8	20	12	196, 7	2	3,46
	Ditto of 10 Batzen of Ditto	W. 1	2	5	1	4	13	0	101, 5	1	2,17
	Ecu of 40 Batzen of the Helvetic Republic, (1798) ½ in prop.	W. 0	6	18	23	18	10	14	409, 5	4	9,18
	Piece of 10 Batzen	W. 1	4	5	3	4	13	17	100, 5	1	2,03
	Ditto of 5 Batzen	W. 3	2	3	2	2	5	8	49, 3	0	6,88
	Ecu of 4 Franken (1801)	W. 0	7	18	23	18	8	12	407, 6	4	9,18
	(See also Basil, Bern, Geneva, Neufchatel, St. Gall, and Zurich.)										
Treves	Rixdollar, specie	W. 1	3	18	1	16	4	2	359,	4	2,13
Turkey	Altmichlic of 60 Paras (1757)	W. 4	2	18	12	11	16	0	259,	3	0,16
	Piastre of Mustapha III. (1757)	W. 4	11	12	7	7	6	0	161,	1	10,48
	Altmichlic of 1773	W. 4	9½	17	5¼	10	6	12	228, 1	2	7,85
	Piastre of Abdul-hamed (1773)	W. 5	2	12	7	6	15	8	147, 5	1	8,59
	Another of the same period	W. 4	9	12	0	7	4	10	159, 6	1	10,28
	Piece of 100 Paras of Selim (1789)	W. 5	9	20	7⅜	10	3	4	229, 7	2	8,07
	Double Piastre of Ditto	W. 5	12	16	22⅜	8	9	10	186, 4	2	2,03
	Piastre of Selim of 1801	W. 5	6	8	6	4	7	8	95, 7	1	1,36

* This is the coin which is universally circulated under the name of the Spanish Dollar.

		Assay.		Weight.		Stan. Weight.			Contents in pure Silver.	Value in Sterling.	
		oz.	dwt.	dwt.	gr.	dwt.	gr.	mi.	grains.	s.	d.
Turkey	Half Piastre	W. 6	13	4	1	1	14	16	35, 9	0	5,01
	Piastre of Crim Tartary (1778)	W. 6	12	10	5	4	2	4	90, 9	1	0,69
	Piastre of Tunis (1787)	W. 6	5½	10	0	4	8	6	96, 5	1	1,47
	Piastre (1818)	W. 5	14	6	6½	3	1	4	67, 7	0	9,45
	Beshlie	W. 2	6	15	16½	12	10	8	276,	3	2,54
	Piece of Ten Paralis	W. 5	14	0	16¾	8	14	0	7, 5	0	1,04
Tuscany	Ducatone (1676)	B. 0	7	20	2	20	17	4	460,	5	4,23
	Livornina (1723)	W. 0	3	17	10¼	17	4	13	381, 7	4	5,30
	Pezza della rosa (1726)	W. 0	2	16	17¾	16	14	2	368, 2	4	3,41
	Francescone (1738) ½ in proportion	W. 0	2	17	13½	17	9	14	386, 4	4	5,95
	Leopoldone (1790)	W. 0	4	17	15	17	7	8	384, 3	4	5,66
	Piece of 10 Paoli of the Kingdom of Etruria (1801)	W. 0	4	17	13½	17	5	18	382, 9	4	5,46
	Scudo Pisa of Ditto (1803)	W. 0	2	17	12	17	8	4	385, 0	4	5,76
	Piece of 10 Lire Ditto (1803)	B. 0	7	25	6½	26	1	12	578, 7	6	8,80
	Ditto of 5 Lire Ditto (1803)	B. 0	7	12	15¼	13	0	18	289, 4	3	4,41
	Lira (1803)	B. 0	7	2	8	2	9	16	53, 4	0	7,45
United States*	Dollar (1795) ½, &c. in proportion	W. 0	6½	17	8	16	19	16	373, 5	4	4,15
	Dollar (1798)	W. 0	7	17	10½	16	21	6	374, 9	4	4,35
	Dollar (1802)	W. 0	10½	17	10	16	14	0	368, 3	4	3,42
	Dollar, an average of 8 years	W. 0	8½	17	8	16	16	0	370, 1	4	3,68
	Dime, or 1/10 Dollar (1796)	W. 0	4	1	19½	1	18	14	39, 5	0	5,71
	Half Dime (1796)	W. 0	7	0	21¾	0	21	0	19, 5	0	2,72
Venice	Scudo della Croce	B. 0	5	20	4½	20	15	8	458, 2	5	3,98
	Giustina, or Ducatone	B. 0	5½	17	12	17	22	8	398, 1	4	6,47
	Ducato†	W. 1	5	14	6	12	15	8	280, 8	3	3,21
	Lirazza, or Piece of 30 Soldi	W. 6	8	4	18¾	2	0	10	44, 9	0	6,26
	Tallaro (½, &c. in proportion)	W. 1	3	18	10¾	16	12	16	367, 1	4	3,26
	Osella	B. 0	4½	6	6¾	6	9	16	142, 3	1	7,87
	Scudo of 10 Lire (1797)	W. 1	4	18	10¾	16	10	16	365, 2	4	2,99
	Piece of 2 Lire, or 24 Creutzers (1800)	W. 8	4½	5	19½	1	12	2	33, 4	0	4,66
	Ditto of 1 Lira	W. 8	3	2	21	0	18	7	16, 9	0	2,35
	Ditto of 2 Lire, called Moneta provinciale (1808)	W. 8	3	5	13½	1	11	8	32, 8	0	4,58
	Ditto of 1 Lira	W. 8	5	3	1¾	0	18	8	17, 5	0	2,44
	Ditto of 2 Lire (1802) ½ and ¼ in prop.	W. 8	4	5	6¼	1	8	19	30, 5	0	4,25
West Indies	(*See* vol. i.)										
Wirtemberg	Rixdollar, specie	W. 1	3	18	1	16	14	2	359, 1	4	2,14
	Copstuck	W. 4	2	4	6½	2	16	12	59, 8	0	8,35
Wurtzburg	Rixdollar, specie	W. 1	3	18	1¾	16	4	16	359, 7	4	2,22
	Copstuck	W. 4	3	4	6½	2	16	6	59, 3	0	8,28
Zurich	Rixdollar, or Ecu (1753)	W. 0	14½	18	1¾	16	21	8	375,	4	4,36
	Half Rixdollar (1753)	W. 0	19½	8	23½	8	4	12	181, 8	2	1,38
	Ecu (1761)	W. 1	5	17	23¼	15	22	14	354,	4	1,43
	Half Ecu (1761)	W. 1	5	8	21¾	7	21	4	175,	2	0,43
	Ecu (1773)	W. 0	19	17	2	15	14	18	346, 8	4	0,42
	Half Ecu (1773)	W. 0	19	8	13	7	19	9	173, 4	2	0,21
	Ecu (1794)	W. 0	19½	16	6¼	14	19	18	329, 3	3	9,98
	Half Ecu (1786)	W. 1	0½	8	4¾	7	10	10	165, 2	1	11,06
	Piece of 20 Schillings (1793)	W. 3	9½	3	18¾	2	14	6	57, 6	0	8,04

* The American Dollars, and inferior Silver Pieces of late coinage, vary in fineness from W. 4 dwt. to W. 9½ dwt.

† The Venetian Silver Ducats vary in weight from 13 dwt. 18 gr. to 14 dwt. 19 gr. some (of 1763) weighing only 13 dwt. 10 gr. The fineness also varies from W. 1 oz. 6 dwt. to W. 1 oz. 3¾ dwt.

EAST INDIES.

		Assay.		Weight.		Stan. Weight			Contents in pure Silver.	Value in Sterling.	
		oz.	dwt.	dwt.	gr.	dwt.	gr.	mi.	grams	s.	d.
East India	Rupee of Mohammed Shah	B. 0	6½	7	9¼	7	14	9	168, 7	1	11,55
....	of Ahmed Shah	B. 0	12	7	9½	7	18	16	172, 8	2	0,12
....	of Alhm Ghir (1759)	B. 0	13	7	11½	7	22	0	175, 8	2	0,54
....	of Shah Allum (1772)	B. 0	14	7	10	7	21	4	175,	2	0,43
....	of the same (Benares 1774)	B. 0	8	7	6¾	7	13	0	167, 5	1	11,38
....	of the same (1779)	B. 0	14½	7	11½	7	23	8	176, 8	2	0,68
....	Benares (1818)	B. 0	1½	7	7	7	14	5	168, 9	1	11,58
....	, Sicca, coined by the East India Company at Calcutta	B. 0	13	7	11½	7	22	0	175, 8	2	0,54
....	Calcutta (1818)	Stand.		8	0	8	0	0	175, 9	2	0,56
....	Arcot (1759)	B. 0	7	7	9¼	7	14	16	169, 1	1	11,61
....	Ditto (1782)	B. 0	8	7	6	7	12	4	166, 8	1	11,29
....	Ditto (1788)	B. 0	8	7	9¼	7	15	12	169, 8	1	11,71
....	Ditto, of the latest coinages	B. 0	4½	7	8½	7	12	2	166, 5	1	11,25
....	Bombay, old	B. 0	13	7	10⅓	7	21	4	174, 9	2	0,42
....	Bombay, new, or Surat (1818)	W. 0	0¼	7	11	7	10	4	164, 7	1	11,01
....	Lucknow	B. 0	8¾	7	5¼	7	12	2	166, 5	1	11,25
....	Sultanny	B. 0	3½	7	9	7	12	0	166, 3	1	11,22
....	Madepoor, or Nowsee	W. 0	5	7	5¾	7	1	16	157, 1	1	9,93
....	Madras Rajapoor	B. 0	4	7	7	7	10	4	164, 8	1	11,01
....	Jeypoor	B. 0	12	7	7	7	16	8	170, 6	1	11,82
....	Furruckabad (1818)	B. 0	1¼	7	5	7	10	14	165, 3	1	11,07
....	Chanderry	W. 0	0¾	7	5	7	4	8	159, 5	1	10,27
....	Oukery	W. 1	0½	7	7	6	14	0	146, 9	1	8,51
....	Shree Sicca of Poona	W. 0	1½	7	4½	7	3	6	158, 5	1	10,13
....	Halee Sicca	B. 0	12½	7	7¼	7	17	2	171, 2	1	11,90
....	Ougein	B. 0	5	7	6¼	7	10	4	164, 8	1	11,01
....	Maisore, or new Holkar	B. 0	7	7	5	7	10	8	165, 1	1	11,05
....	Indore Holkar	B. 0	4¼	7	5	7	8	6	163, 1	1	10,77
....	Chinsouree	B. 0	2	7	4¾	7	6	6	161, 2	1	10,50
....	Broach, old	W. 0	0½	7	10	7	0	10	164, 3	1	10,94
....	Broach, new	W. 0	10	7	10	7	1	18	157, 2	1	9,95
....	Brodera, old	W. 0	4½	7	10½	7	6	17	161, 8	1	10,59
....	Brodera, new	W. 0	10½	7	10½	7	2	2	157, 3	1	9,96
....	Ana Sai, coined at Caira	W. 0	10⅞	7	8¼	6	23	14	155, 1	1	9,65
....	Ana Sai, coined at Pitlad	W. 0	17½	7	9¼	6	19	4	151,	1	9,08
....	Amedabad Sicca	W. 0	7½	7	10	7	3	18	159, 1	1	10,21
....	Mungull Sai	W. 0	10½	7	10½	7	2	4	157, 4	1	9,97
....	Munno Sai	W. 0	8¾	7	9¾	7	2	14	157, 9	1	10,04
....	Scea Sai (coined in Futty Sing's time)	W. 0	9½	7	7⅞	7	0	4	155, 6	1	9,72
....	Cambay	W. 0	18½	7	10	6	19	2	150, 9	1	9,07
....	Persian (1745)	B. 0	13	7	9¼	7	19	10	173, 5	2	0,22
....	Ditto (1789)	B. 0	12½	7	10	7	20	0	173, 9	2	0,28
....	Madras (1818)	Gold Stand.		7	12	7	12	0	165,	1	11,04
Fanam, Cananore		W. 0	1¼	1	11½	1	11	10	32, 9	0	4,5
....	Bombay, old	B. 0	13	1	11½	1	13	16	35,	0	4,88
....	Pondicherry	B. 0	5½	1	0¼	1	1	2	22, 8	0	3,18
....	Ditto, double	W. 0	3	1	13½	1	18	2	39,	0	5,14
Larin		B. 0	10½	3	2¼	3	6	0	72, 1	0	10,06
Bussora Crux		W. 6	0¾	11	16	5	7	14	118, 1	1	4,49
Gulden of the Dutch East India Com. (1820)		W. 0	7½	6	22	6	16	6	148, 1	1	8,72

COMPUTATION OF COINS.

In order to show the principles on which the foregoing Tables are calculated, it may be proper first to explain the manner by which the value of any coin may be determined when its weight and fineness are known. For this purpose, the quantity of standard gold and silver contained in it must be first found; and then its sterling value may be ascertained from the Mint-price of the standard ounce.

GOLD COINS.

What is the sterling value of a French Double Louis d'or, the Report (per table, page 158,) being as follows:—weight 9 dwt. 20 gr. Assay W. $1\frac{1}{2}$ gr. that is, 0 car. $1\frac{1}{2}$ gr. worse than English standard?

	car.	gr.
From	22	0 the fineness of standard gold,
Subtract	0	$1\frac{1}{2}$
	21	$2\frac{1}{2}$

	car.		car.	gr.		dwt.	gr.		dwt.	gr.	
Then, as	22	:	21	$2\frac{1}{2}$	: :	9	20	:	9	16	the standard gold contained in the piece.
	4		4			24					
	88		$86\frac{1}{2}$			236					

86,5
88)20414,0(232 grains nearly.
176 216
281 &c. 9 dwt. 16 gr.

	oz.		£	s.	d.		dwt.	gr.		£	s.	d.	
Again, as	1	:	3	17	$10\frac{1}{2}$	: :	9	16	:	1	17	$7\frac{1}{2}$	the value of the piece in sterling.
	20		20				24						
	20		77				232						
	24		12				$934\frac{1}{2}$						
	480		$934\frac{1}{2}$										

48,0)21680,4(451,6
192
2,0)37 $7\frac{1}{2}$
248 &c.
4 £1 17s. $7\frac{1}{2}$d.
&c.

The foregoing calculations may be considerably abridged by using a constant decimal as a multiplier. The following is a general rule for gold coins.

Multiply the carat grains in the fineness by the troy grains in the weight, and again multiply this product by 92132; *cut off nine decimals, which will give the answer in pounds and decimals of a pound sterling.* Thus, in the foregoing question of the Louis d'or,

$$\begin{array}{r} 86{,}5 \times 236 = 20414 \\ 92182 \\ \hline 1{,}881803348 \\ 20 \\ \hline 17{,}636 \\ 12 \\ \hline \end{array}$$

&c.

Ans. £1 17s. $7\frac{1}{2}$d.

To find the contents of pure gold in the above coin, say,

As car. 24 : car. 21 gr. $2\frac{1}{2}$ :: dwt. 9 gr. 20 : gr. 212,6

Or, the contents in pure gold may be found by multiplying the standard weight by 11, and dividing by 12; and standard gold may be reduced to pure by reversing this operation.

SILVER COINS.

What is the value of a Spanish Dollar, the Report (per table, page 168,) being as follows:—weight, 17 dwt. 8 gr. Assay W. 8 dwt. that is, 0 oz. 8 dwt. worse than English standard?

From oz. 11 dwt. 2 the fineness of standard silver,
Subtract 0 8

10 14

Then, as oz. 11 dwt. 2 (20 = 222) : oz. 10 dwt. 14 (20 = 214) :: dwt. 17 gr. 8 (24 = 416) : dwt. 16 gr. 17 (24 + 214 = 89024) the standard silver contained in the Dollar.

$$\begin{array}{r} 222)89024(401 \\ 888 \\ \hline 224 \end{array}$$

16 dwt. 17 gr. &c.

Again, as oz. 1 or gr. 480 : s. 5 d. 2 (12 = 62) :: dwt. 16 gr. 17 (24 = 401) : s. 4 d. $3\frac{3}{4}$ the value of the Dollar in sterling.

$$\begin{array}{r} 48{,}0)2486{,}2(51{,}8 \\ 2400 \\ \hline 86 \end{array}$$

4s. $3\frac{3}{4}$d. &c.

The foregoing operation may be thus abridged.

Rule for Silver Coins.—*Multiply the carat grains in the fineness by the troy grains in the weight, and again multiply this product by* 5818; *cut off seven decimals, which will give the answer in pence and decimals of a penny sterling.*

Thus, in the foregoing question of the Spanish Dollar,

$$214 \times 416 = 89024$$
$$5818$$
$$51,7941632$$
$$4$$
$$3,1766528$$

Ans. 4s. $3\frac{3}{4}$d.

To find the contents of the Spanish Dollar in pure silver, say—

	oz.		oz.	dwt.		dwt.	gr.		gr.
As	12	:	10	14	: :	17	8	:	370,9

Or the contents in pure silver may be found by multiplying the standard weight by 37, and dividing by 40; and, on the contrary, multiplying the contents in pure silver by 40, and dividing by 37, will give the standard weight.

RULES FOR STANDARDING COINS AND BULLION.

The precious metals in England are mostly bought and sold at so much per ounce standard. It therefore becomes necessary to determine the standard weight; and this must be calculated from the Assay Master's Report of weight and fineness.

But it may be useful first to explain the characters which are generally used in these Reports.

Assayers' Marks.

1 *	.	is	1 Dwt.
ij		..	2 ....
2		..	5 ....
C		..	10 ....
C2		..	15 ....
C2ij		..	18 ....
C/C		..	19 ....
ob	*(Obulus)*	..	$\frac{1}{2}$ ....

The common method of finding the value of small quantities of gold and silver is by allowing, from the Assay Master's Report, at the rate of 4s. per carat, better or worse, in every ounce weight of gold; and at the rate of 6d. per ounce, better or worse, in every ounce weight of silver. But when silver is more than 10 dwt. worse, an allowance of 2d. per ounce must be made for refining.

* This mark sometimes stands for 1 ounce as well as 1 pennyweight.

THE FOLLOWING ARE THE SCALES OF ALLOWANCE:

Scale for Gold.	Scale for Silver.
1 car. (4s.	1 oz. (6d.
1 gr. (1s.	15 dwt. (4½d.
½ gr. (6d.	10 dwt. (3d.
¼ gr. (3d.	5 dwt. (1½d.
	2½ dwt. (¾d.

Thus, to find the value of 2 oz. of gold B. 1 car. 1 gr. at £4 per oz.—To £8 (for 2 oz.) add 10s. for better, which gives the value £8 10s.—And to find the value of 12 oz. of silver, W. 10 dwts. at 5s. 6d. per oz. From £3 6s. (for 12 oz.) subtract 3s. for worse, which gives the value £3 3s.

RULES FOR STANDARDING GOLD.

As 22 carats are to the Assay or Report of fineness, so is the gross weight to the quantity that is to be added or subtracted from this gross weight, according as the report is *better* or *worse*. If better, the additional quantity is called (by the trade) *Betterness*, and if worse, the subtractional quantity is called *Worseness*.

Example—How much standard gold is there in an ingot of the following Report, B. 1 car. 3½ grains. Weight, 67 oz. 15 dwt. 8 gr.?

As 22	:	1 3½	: :	oz. 67	dwt. 15	gr. 8
4		4		20		
88		7		1355		
4		4		24		
352		30		32528		

Or thus, as 22 : 23 3½ :: 67 15 8 : 73 10 20

32528 × 30 ÷ 352 = 2772 gr. = 5 oz. 15 dwt. 12 gr.

	oz.	dwt.	gr.	
To	67	15	8	Gross Weight.
Add	5	15	12	Betterness.
	73	10	20	Standard.

The following method for standarding gold may be generally used with advantage:—

	oz.	dwt.	gr.	
	67	15	8	Gross Weight B. or W. 1 car. 3½ gr.
2 gr. = ½	33	17	16	
1 = ½	16	18	20	
½ = ½	8	9	10	
	2)127	1	6	} Divided by 22.
	11)63	10	15	}
	5	15	12	Betterness or Worseness, as above.

RULES FOR STANDARDING SILVER.

As 11 oz. 2 dwt. to the assay, so is the gross weight to the quantity which is to be added or subtracted, according as the Report is B. or W.

EXAMPLE—In 287 oz. of silver, W. 12½ dwt. how much standard?

	oz.	dwt.		dwt.		oz.
As	11	2	:	12½	: :	287
	20					20
	222					2840
						12½

Or thus, as oz. 11 dwt. 2 : 10 9½ :: 287 = oz. 270 dwt. 16 gr. 20

222)71750(323 dwt. 4 gr. = 16 oz. 3 dwt. 4 gr.

	oz.	dwt.	gr.	
From	287	0	0	Gross Weight.
Subtract	16	3	4	Worseness.
	270	16	20	Standard.

From the last example, the reason of the following rule for standarding silver is obvious.

Multiply half the weight in ounces by the assay in pennyweights, and divide the product by 111, *the quotient will be the betterness or worseness in ounces.*

EXAMPLE—How much standard silver in 160 ounces of B. 18½ dwt.?

Half weight 80
18½

111)1480(13 oz. 6 dwt. 16 gr.
111

370 &c.

	oz.	dwt.	gr.	
To	160	0	0	Gross.
Add	13	6	16	Betterness.
	173	6	16	Standard.

It should be observed that there are tables constructed, and sometimes used, for standarding gold and silver, as may be seen in *Postlethwayt's Dictionary of Commerce*, vol. 1, page 388 to 398; but from the simplicity and conciseness of the foregoing examples, it is manifest that such tables cannot much shorten the operation, though they may serve to check or prove the calculation.

RULES FOR CONVERTING THE FOREGOING TABLES OF COINS INTO FRENCH DENOMINATIONS.

To reduce English gold coin into Francs, and the contrary.

RULE—*Multiply the number of Pence by* ,105 : *and, the number of Francs by* 9,525.

EXAMPLE—How many Francs in a Sovereign?

Here 240d. × ,105 = 25 Francs 20 Centimes.
And again, 25 Francs 20 Centimes × 9,525 = 240 Pence.

To reduce English sterling silver into Francs, and the contrary.

RULE—*Multiply the number of Pence by* ,103 : *and, the number of Francs by* 9,709.

EXAMPLE—How many Francs in 240 Pence, silver value?

240 × ,103 = 24 Francs 72 Centimes;
And this number × 9,709 = 240 Pence.

The foregoing results are the Pars, very nearly, in gold and silver value, *see page* 146.

To bring English grains into Grammes, and the contrary.

RULE—*Multiply the number of Grains by* ,064792: *and, the number of Grammes by* 15,434.

EXAMPLE—How many Grammes in a Sovereign, weighing 113,1 English grains of pure gold?

Answer, 7 Grammes 328 Decigrammes, nearly; and this number multiplied by 15,434 equals 113,1 grains.

By the application of the above rules, all the foregoing Tables of Coins may be converted into French Denominations, except the first column, which contains the Assay, and which is thus reduced.

FOR GOLD COINS.

RULE—*Make the Assay Report the numerator, and* 24 *the denominator, and this vulgar fraction reduced to three places of decimals will give the Milliemes, according to the French expression.*

EXAMPLE—To convert English standard gold into Milliemes.

Thus, $\frac{22}{24}$ = 916 Milliemes. If the gold be 1 carat 2 grains worse than standard.

	car.	gr.	
	22	0	
	1	2	
	20	2	24
	4		4
Carat grains	82		96 — then $\frac{82}{96}$ = 854 Milliemes.

Milliemes are reduced to carats by multiplying by 24 and cutting off three decimals.

FOR SILVER COINS.

To reduce English Assay Reports of silver into French Reports, or Milliemes.

RULE—*Make the number of pennyweights in the Assay Report the numerator, and* 240 *the denominator, and this reduced to a decimal fraction of three places gives the Milliemes.*

EXAMPLE—To reduce English standard silver into Milliemes.

dwt.	gr.	
11	2	
20		
222		
240		= $\frac{37}{40}$ = 925 Milliemes.

To reduce Milliemes into English Assay Reports of silver.

RULE—*Multiply by* 240, *and cut off three decimals.* Thus, 891 Milliemes × 240 = 214 = 10 dwt. 14 gr. and this subtracted from 11 dwt. 2 gr. gives 8 dwt. worse than English standard.

EXPLICATION OF MODERN COINS;

*Containing a Description of the Devices and other Impressions of the principal Coins in the foregoing Tables, with Translations of their Inscriptions and Legends.**

AIX LA CHAPELLE.

SILVER COINS.

THE RATHSPRÆSENTGER bears on the obverse an eagle within a circle, marked 16 on his breast, (32 on the double piece,) and within another circle the legend

REGVM CVRIA PRINCIPALIS PRIMA,
First and principal court of Kings,

and next the edge,

VRBS AQVENSIS. VRBS REGALIS. REGNI SEDES,
City of Aix; royal city; seat of government.

On the reverse, an altar, with two swords and a crown over it on the double piece, but on the single, a crown and the date within a circle; the legend on each is

LOCVS CORONATIONIS CÆSAREÆ,
The place of Cæsar's coronation:

Cæsar being a general title for the Emperors.

AUGSBURG.

GOLD COIN.

The DUCAT—Head of the reigning Prince, with name and title: thus,

FRANCISCVS I. D.G. ROM. IMP. S.A.
Francis I. by the grace of God, Emperor of Rome; ever august.

Reverse, arms of the city; legend,

AVGVSTA VINDELICORVM,

(the ancient name of the place and people.)

AUSTRIAN DOMINIONS.

GOLD COINS.

The SOUVERAIN—Head of the reigning Emperor, with the name and title; thus,

FRANCISC. II. D. G. R. IMP. S. A. GE. HIE. HV. BO. REX.

that is, Franciscus secundus, Dei gratia, Romanus Imperator, semper augustus, Germaniæ, Hierosolymæ, Hungariæ, Bohemiæ, Rex,

Francis II. by the grace of God, Roman Emperor, ever august, King of Germany, Jerusalem, Hungary, and Bohemia.

Reverse, the arms of Austria on a St. Andrew's cross, with the date, and the legend,

ARCH. AVS. DVX BVRG. LOTH. BRAB. COM. FLAN.

that is, Archidux Austriæ, Dux Burgundiæ, Lotharingiæ, Brabantiæ, Comes Flandriæ,

* The words, or initials, on coins are generally thus distinguished. When they occupy the field and are written across the coin, they are called an *Inscription;* but when they run round the margin or on either side of the figure, they are denominated a *Legend;* and they are also thus called when they are upon the *Exergue,* which is the bottom of the piece, commonly separated from the field by a line.

It should be also observed that the side of a coin on which the portrait is delineated, is commonly termed the *Face* or *Obverse,* and the opposite side is called the *Reverse.*

As each description begins with the *Obverse,* the frequent repetition of the word seems unnecessary.

Archduke of Austria, Duke of Burgundy, Lorraine, Brabant, Count of Flanders.

The Double Souverain bears the same impression.

The DUCAT—Head of the reigning Sovereign. Reverse, arms of Austria with the two-headed eagle; the legends are the same as on the Souverain, except that among the titles, Brabant and Flanders are omitted, and the letters D. H. or D. HETR. are inserted; *that is*, Dux Hetruriæ, *Duke of Tuscany*. But the Hungarian Ducats, called *Kremnitz*, bear on the obverse a whole length figure of the Emperor, with the name and titles as above; and on the reverse, the Virgin and Child, with this legend,

S. MARIA MATER DEI PATRONA HVNG.
Holy Mary, mother of God, patroness of Hungary.

SILVER COINS.

The RIXDOLLAR *(Constitution)*—Head of the reigning Emperor, with name and titles; thus,

CAR. VI. D. G. R. I. S. A. G. HI. H. BOH. REX,

that is, Carolus sextus, Dei gratia, Romanus Imperator, &c. as on the Souverain. Reverse, a two-headed eagle crowned, bearing on his breast the arms of Austria, and in his talons a sword and sceptre; legend,

ARCHID. AUST. DUX. BU. M. MOR. COM. TYROL,
Archduke of Austria, Duke of Burgundy, Marquis of Moravia, Count of Tyrol,

with the date; and round the edge of the piece,

CONSTANTER CONTINET ORBEM,
He always guides the globe steadily.

The RIXDOLLAR *(Convention)*—Head of the reigning Sovereign, with name and title; thus,

M. THERESIA, D. GR. IMP. GE. HU. BO. REG.
Maria Theresa, by the grace of God, Empress of Germany, Queen of Hungary and Bohemia.

Reverse, as on the Rixdollar Constitution. The legend round the edge of the piece of Francis I. is,

PRO DEO ET IMPERIO,
For God and the Empire;

Round that of Maria Theresa,

JUSTITIA ET CLEMENTIA,
Justice and Clemency;

And round that of Joseph II.

VIRTUTE ET EXEMPLO,
By virtue and example.

The RIXDOLLAR of Hungary—Head, name, titles, and legend round the edge, as above. Reverse, the Virgin and Child, and the letters K. B.; legend, as on the Hungarian Ducat.

The FLORIN, or Half Rixdollar, bears the same impressions as the Rixdollar; as also, the Half Florin.

The COPSTUCK, or COPSTICK, (the 20 Creutzer piece,) bears the same impressions as the Rixdollar, except that there is no legend round the edge, and it is marked 20 on the reverse; the Half-Copstuck is marked 10.

BADEN.

GOLD COIN.

The DUCAT—A female figure standing by an altar; legend,

OBSEQUIUM JURARE PARATA,
Ready to swear obedience,

and the date. Reverse, the arms of Baden.

SILVER COIN.

The RIXDOLLAR—Head of the reigning Prince, with name and title; thus,

CAROLUS FRID. D. G. MARCHIO BAD. ET. H.
Charles Frederick, by the grace of God, Marquis of Baden, &c.

Reverse, arms of Baden; legend,

AD NORMAM CONVENTIONIS,
According to the rule of the Convention;

and on the exergue, the date, and

X EINE F MARCK,
Ten pieces to a Mark fine.

BASIL.

Gold Coins.

The Ducat—A griffin supporting the arms of the Republic; legend,

DOMINE CONSERVA NOS IN PACE,
Lord preserve us in peace.

Reverse,

DUCATUS REIPUBL. BASILEENSIS,
Ducat of the Republic of Basil.

The Pistole—Arms of the city; legend,

RESPVBLICA BASILIENSIS.

Reverse, a tripod, with the legend as on the Ducat.

Silver Coins.

The Patagon or Ecu—A view of the city, over which is the name

BASILEA.

Reverse, a griffin supporting the arms of the city, with legend as on the Ducat. But the Eens of 1795, &c. bear the arms of the city, and the legend,

RESPVBLICA BASILIENSIS;

and on the reverse, a wreath of oak, surrounding the legend as on the Ducat.

The Thaler or Rixdollar—The griffin, arms, and legend, as on the reverse of the Patagon. Reverse, a wreath of laurel, with the legend,

MONETA REIPUB. BASILEENSIS,
Money of the Republic of Basil.

BAVARIA.

Gold Coins.

The Carolin—Head of the reigning Prince; legend,

CA. D. G. V. B. ET P. S. D. C. PR. S. R. I. A. ELL.

That is, Carolus, Dei gratia, utrinsque Bavariæ et Palatinatus Dux, Princeps sancti Romani Imperii Archidux et Elector,

Charles, by the grace of God, Duke of both Bavarias and the Palatinate, Prince, Archduke, and Elector of the Holy Roman Empire.

Reverse, the Virgin and Child, supporting the arms of Bavaria; legend,

CLYPEVS OMNIBVS IN TE SPERANTIBVS,
A shield to all who hope in thee,

and the date. The Half and Quarter Carolins bear the same impression.

The Max d'or has the same impressions as the Carolin, except that the name is

MAX. JOS.
Maximilian Joseph.

The Ducat—Head of the reigning Prince, with name and title; thus,

CAR. THEOD. D. G. C. P. R. VTR. BAV. DVX.

Reverse, the arms of Bavaria; legend,

S. R. I. ARCHID. & EL. DVX. I. CL. & M.

These initials mean,

Charles Theodore, by the grace of God, Count Palatine, Duke of both Bavarias, &c.

as on the Carolin; and the letters DVX. I. CL. and M. signify

Duke of Juliers, Cleves, and Munster.

But the Ducats coined since the year 1800, bear, with the head, all the titles as above, and the legend on the reverse is

PRO DEO ET POPULO,
For God and the people.

Silver Coins.

The Rixdollar—Head of the reigning Prince, with name and titles as on the gold coins. Reverse, arms of Bavaria and the date; and on other pieces, the Virgin and Child, with the legend,

PATRONA BAVARIÆ,
Patroness of Bavaria;

but the new Rixdollar, coined in 1800, bears on the reverse the arms of Bavaria, and the legend,

PRO DEO ET POPULO.

The Copstuck bears the same impressions as the Rixdollar.

BERN.

Gold Coins.

The Ducat—Arms of the city; legend,

REIPUBLICA BERNENSIS,

Republic of Bern.

Reverse,

BENEDICTUS SIT JEHOVA DEUS,

Blessed be God Jehovah.

The Pistole—Arms of the Republic; legend,

RESPUBLICA BERNENSIS.

Reverse, a wreath enclosing the words

DEUS PROVIDEBIT,

God will provide.

Other Pistoles have on the reverse a man armed with a battle-axe and resting upon the fasces, with the same legend.

Silver Coins.

The Patagon or Ecu—A man resting on his sword; legend as the Pistole. Reverse, arms of the city; legend,

RESPUBLICA BERNENSIS.

The Piece of 10 Batzen (as well as those of 5 and $2\frac{1}{2}$ Batzen)—Arms of the city, with

RESPUBLICA BERNENSIS.

Reverse, a cross formed by eight B's and four crowns; legend as on the Ecu.

BREMEN.

Silver Coin.

The Piece of $\frac{2}{3}$, or of 48 Grotes—A two-headed eagle and a crown, with the name of the reigning Emperor; thus,

FRANCISCUS D. G. ROM. IMP. S. AUG.

Francis, by the grace of God, Emperor of Rome, ever august.

Reverse, arms of the city; with the legend,

MONETA NOVA REIPUBL. BREMENSIS,

New money of the Republic of Bremen.

BRUNSWICK.

Gold Coins.

The Carl d'or—Head of the reigning Prince; legend,

CAROLVS D. G. DVX. BRVNS. ET LVN.

Charles, by the grace of God, Duke of Brunswick and Luneburg.

Reverse, a horse in full speed; legend,

NVNQVAM RETRORSVM,

Never backward, or straight forward.

Such as have been coined since 1796 bear no head, but the arms of Brunswick, with

CAROLVS GVLIELMVS FERDINANDVS;

and on the reverse,

X THALER, or V THALER.

with the date; and the legend as on the Carl d'or.

The Ducat bears the same impressions as the Carl d'or.

Silver Coins.

The Rixdollar (Old)—Head, name, and title of the reigning Prince, as on the gold coins. Reverse, the horse and legend as on the Carl d'or; but on the exergue are the words

X EINE FEINE MARCK CONVEN. M.

Ten pieces to a Mark fine, Convention money.

The Rixdollar of 1795—On the obverse, the words

1 SPECIES THALER,

and the date; legend,

X EINE FEINE MARCK, &c.

as above. Reverse, arms of Brunswick, with the name and title of the reigning Prince.

The Piece of $\frac{2}{3}$ (fine)—A man holding a tree, with the number 24, and the legend,

NVNQVAM RETRORSVM,

as on the Carl d'or. Reverse, a circle, containing the words

24 MARIENGROSCH. FEIN SILBER,
24 Mariengroschen, fine silver.

Legend, the name and title of the reigning Prince.

The Piece of $\frac{3}{4}$ (base)—Head of the reigning Prince, with name and title. Reverse, the horse and legend as before; and also the words

XX EINE FEINE MARCK, &c.

as on the Rixdollar and Piece of $\frac{2}{3}$ fine. The pieces of 1791 bear no head, but the words

XVI GVTE GROSCH. and XX EINE, &c.

Reverse, arms of Brunswick, with the Prince's name and title. The Pieces of 1795 bear the words

XXIIII MARIENGROSCH.

legend,

NACH DEM LEIPZIGER FVS,
According to the Leipsic rate of coinage.

Reverse, a horse, the Prince's name and title, and the mark $\frac{2}{3}$.

COLOGNE.

Gold Coins.

The Ducat—Head of the reigning Sovereign, with name and title; thus,

CLEM. AUG. ARCHIEP. ET EL. COLON.;

that is, Clemens Augustus Archiepiscopus et Elector Coloniensis,

Clement Augustus, Archbishop and Elector of Cologne.

Reverse, a circle of rays enclosing the legend

NON MIHI SED POPULO,
Not for me but for the people.

The Ducats coined by the City of Cologne bear the head of the reigning Sovereign, with his name and titles; and on the reverse, the arms of the city, with

DUCAT. CIVIT. COLON.
Ducat of the City of Cologne.

Silver Coin.

The Rixdollar—Head of the reigning Sovereign, with his name and titles. Reverse, arms of the city; legend,

MONETA NOVA LIB. ET IMPER. CIVIT. COLON.;

that is, Moneta nova liberæ et imperialis civitatis Coloniensis,

New Coin of the free and imperial City of Cologne,

with the date; and on some Rixdollars,

MON. NOVA LIB. REIPUB. COLONIENSIS,
New coin of the free Republic of Cologne.

DENMARK.

Gold Coins.

The Ducat Current—Head of the reigning King, with name and title, thus:

CHRISTIANVS VII. D. G. REX DAN. NORVEG.
Christian VII. by the grace of God, King of Denmark and Norway.

Reverse, value of the coin, surrounded by a crown; legend,

GLORIA EX AMORE PATRIÆ,
Glory from the love of our country.

The Ducat Specie of 1791—A man resting on a club and bearing a shield; legend,

MONETA AUREA DANICA,
Gold money of Denmark.

Reverse,

1 SPECIES DUCAT. $23\frac{1}{2}$ KARAT. 67 STYKKER. 1 MARK BRUTO,

1 Ducat specie, $23\frac{1}{2}$ Carats fine, 67 pieces to the Mark gross.

Ducats of anterior date bear on the obverse the head, name, and title of the reigning King; and on the reverse, the arms of Denmark, and the legend

PRUDENTIA ET CONSTANTIA,
Prudence and Perseverance.

Some bear on the reverse a ship, with the legend

DUCE PRUDENTIA CONSTANTIA COMITE,
Prudence being the guide, and Perseverance the companion.

The CHRISTIAN D'OR—Head, name, and title of the reigning Prince, as above. Reverse, a sun and three crowns, with the legend as on the Ducat Current.

SILVER COINS.

The RYKSDALER (old, coined for Norway,)—Head of the reigning King, with name and title; thus,

FRIDERICVS V. D. G. REX DAN. NOR. V. G. or D. G. DAN. NORV. VAND. GOTH. REX,

Frederick V. by the grace of God, King of Denmark, Norway, the Vandals, and the Goths.

Reverse, a lion and battle-axe, the value of the coin, and the following legend in the Norwegian language, in two concentric circles,

MOD TROSKAB DAPPERHED. OGHVAD DER ÆRE GIVER DEN HEELE VERDENRAND BLANT NORSKE KLIPPER LAERE,

Spirit, loyalty, valour, and whatever is honourable, let the whole world learn among the rocks of Norway.

On the same coin, of a later date, the legend is

TROE LOVE MOD OGHVAD DAN KONGENS GUNST KAND VINDE, MENS NORGE KLIPPE HAR MAND SKAL HOS NORDMAND FINDE;

True lion's heart and whatever can win a Danish Monarch's love, whilst Norway has rocks, shall be found among Norwegians.

The RYKSDALER of 1777—The King's cypher and a crown; legend,

D. G. DAN. NORV. VAND. GOTH. REX,

as before. Reverse, arms of Denmark; legend,

GLORIA EX AMORE PATRIÆ,
Glory from the love of our country,

The RYKSDALER of 1795—Head, name, and titles of the reigning King. Reverse, arms of Denmark, and value of the coin.

The 4 MARK Piece—A man on horseback, with the King's name and title, and value of the coin. Reverse, arms of the King; legend,

DOMINUS MIHI ADJUTOR,
The Lord is my helper,

The CROWN—Head of the reigning King, with name, and

DEI GRATIA.

Reverse, a crown, and the inscription,

PRUDENTIA ET CONSTANTIA,
Prudence and Perseverance;

legend, the King's titles, as above.

The RYKSDALER of Holstein — Head, name, and title, as above. Reverse, arms of Denmark with

60 SCHILLING. SCHLESW. HOLST. COURANT,
60 *Schillings Sleswig and Holstein currency.*

The Piece of 24 SCHILLINGS Danish—The King's cypher, with a crown and the titles, as above. Reverse, arms of Denmark, and over them

24 SKILLING DANSKE.

ENGLAND.

OLD GOLD COINS.

The GUINEA—Head of the Sovereign; legend,

GEORGIUS III. DEI GRATIA,
George III. by the Grace of God.

Reverse, the King's arms; legend,

M. B. F. ET H. REX, F. D. B. ET L. D. S. R. I. AT. ET E.

That is, Magnæ Britanniæ, Franciæ, et Hiberniæ, Rex, Fidei Defensor, Brunswickensis et Lunebnrgensis Dux, Sancti Romani Imperii Archithesaurarius et Elector,

King of Great Britain, France, and Ireland, Defender of the Faith, Duke of Brunswick and Luneburg, Arch-Treasurer and Elector of the Holy Roman Empire.

But the coins minted since the Union with Ireland (1801) have the legend,

BRITANNIARUM REX, FIDEI DEFENSOR,
King of the British Islands, Defender of the Faith;
and round the shield, the motto of the Garter,

HONI SOIT QUI MAL Y PENSE,
Shame be to him who thinks ill of it.

The HALF GUINEA has the same impressions as the Guinea.

The SEVEN SHILLING PIECE—Head and name of the Sovereign as above. Reverse, a crown with the legend,

MAG. BRI. FR. ET HIB. REX;

and on the pieces coined since the Union with Ireland,

BRITANNIARUM REX FIDEI DEFENSOR.

NEW GOLD COIN.

The SOVEREIGN—Head of the Sovereign, with the legend,

GEORGIUS III. D. G. BRITANNIAR. REX, F. D.

and the date. Reverse, the image of St. George armed, sitting on horseback encountering the dragon with a spear; the said device is placed within the Garter, bearing its motto as above, with a newly-invented graining on the edge of the piece.

OLD SILVER COINS.

The CROWN—Head of the Sovereign, with

GEORGIUS II. DEI GRATIA.

Reverse, four crowned shields, viz. of England, France, Scotland, and Ireland, with a star in the centre; legend,

MAG. BR. FR. ET HIB. REX,

to which (ever since the accession of the House of Hanover) the King's German titles have been added, as on the Guinea. The Crowns of Charles II. have in the angles between the shields, four double linked C's. Those of William and Mary, four interlinked W's and M's. Some of Queen Anne's Crowns have two roses in two of the angles, and the Prince of Wales's plume of feathers in the others. The Crowns of George I. have four sceptres. It may also be observed, that the Crowns of King William have, instead of the stars in the centre, the arms of Nassau; and that round the edge of the pieces coined by King William and Queen Anne, there is the following legend:

DECUS ET TUTAMEN, ANNO REGNI, &c.
Ornament and safety, the year of the King's reign, &c.

The HALF-CROWN bears the same impressions as the Crown.

The SHILLING bears the same impressions as the Crown, but in the Shillings of George II. there are four roses in the angles, on the reverse; and in the Shillings of George III. the four crowns instead of being placed on the shields, are placed in the angles. The SIXPENCE bears the same impressions as the Shilling.

The DOLLAR (issued by the Bank in 1804), bears the King's head, with the legend,

GEORGIUS III. DEI GRATIA REX.

Reverse, an oval, with a crown of towers over it; enclosing a figure of *Britannia*.

NEW SILVER COINS.

The CROWN—Head of the Sovereign, with the legend,

GEORGIUS III. D. G. BRITANNIARUM REX, F. D.

and the date. Reverse, the same as the reverse of the SOVEREIGN. Round the edge of the piece,

DECUS ET TUTAMEN. ANNO REGNI LX.
Ornament and Safety; the 60th year of the King's reign.

The HALF-CROWN—Head of the Sovereign; legend,

GEORGIUS III. DEI GRATIA,

and the date. Reverse, the arms of the United Kingdom contained in a shield surrounded by the Garter, bearing its motto; legend,

BRITANNIARUM REX, FID. DEF.

with a newly-invented graining on the edge.

The SHILLING and SIXPENCE—Head of the Sovereign; legend,

GEOR. III. D. G. BRITT. REX, F. D.

and the date. Reverse, the same as the Half-Crown, except that the legend is omitted.

The NEW HALF-CROWN of GEORGE IV. bears the effigy of his Majesty, with the inscription

GEORGIUS IIII. D. G. BRITANNIAR. REX, F. D.

Reverse, the ensigns armorial of the United Kingdom contained in a shield, surmounted by the royal crown; the rose, thistle, and shamrock being placed round the shield, with the word ANNO and the date of the year. The edge is marked with the the newly-invented graining.

The NEW SHILLING and SIXPENCE of GEORGE IV. bear the same impressions as the new Half-Crown.

FRANCE.

GOLD COINS.

The LOUIS—Head of the reigning King, with his name and title: thus,

LUD. XVI. D. G. FR. ET NAV. REX,

that is, Ludovicus XVI. Dei Gratia, Franciæ et Navarræ Rex,

Louis XVI. by the Grace of God, King of France and Navarre.

Reverse, the arms of France and Navarre, with a crown over them. On the Pieces coined before 1786, there are two distinct shields; and on those coined since 1786, a double shield; legend,

CHRS. REGN. VINC. IMPER.

that is, Christus regnat, vincit, imperat,

Christ reigns, conquers, governs;

under the arms is a letter, by which the mint where the piece was coined is known. The Double and Half Louis bear the same impressions.

The Pieces struck in the year 1791, have on the obverse the head of the King, with the title,

LOUIS XVI. ROI DES FRANCOIS,
Louis XVI. King of the French;

and on the reverse, the Genius of France writing the Constitution on a tablet resting on a pillar, with a cock on one side, and on the other the fasces and cap of Liberty, with the legend,

REGNE DE LA LOI,
Reign of the law;

and at the bottom,

L' AN 4 DE LA LIBERTE,
The year 4 of liberty.

The Piece of 1793 has, instead of the head, a crown of oak leaves containing the words 24 LIVRES; legend,

REPUBLIQUE FRANÇOISE L'AN II.
French Republic, the year 2.

Reverse, as on the Louis of 1791, except that the date is in figures only.

The Piece of 40 FRANCS, 1802—Head of Bonaparte; legend,

BONAPARTE PREMIER CONSUL,
Bonaparte, first Consul.

Reverse, a wreath of laurel, containing the words 40 FRANCS; legend,

REPUBLIQUE FRANÇOISE AN. XI.

and round the edge of the piece,

DIEU PROTEGE LA FRANCE,
God protect France.

In 1804, on Bonaparte's being declared Emperor, the words round the head were altered to NAPOLEON EMPEREUR. The Piece of 20 Francs bears the same impressions, except the figures that mark its value.

The Piece of 40 FRANCS, 1818—Head of the King, with name and title, thus:

LOUIS XVIII. ROI DE FRANCE.

Reverse, arms of France, and 40 F. within two branches of laurel. Round the edge of the piece,

DOMINE SALVUM FAC REGEM,
O Lord, save the King.

SILVER COINS.

The ECU of 6 LIVRES—Head of the reigning King, with name and title, as on the Louis. Reverse, the arms of France, between two laurel branches; legend,

SIT NOMEN DOMINI BENEDICTUM,
Blessed be the name of the Lord,

and a letter denoting the place where the piece was coined. Round the edge are the words

DOMINE SALVUM FAC REGEM,

as on the 40 Franc Piece. The Ecu of three Livres, the Pieces of 24, 12, and 6 Sous, all bear the same impressions, except that the three last mentioned coins have no motto round the edge.

The ECU of 1791—Head of the King; legend,

LOUIS XVI. ROI DES FRANCOIS.

Reverse, the Genius of France, &c. as on the Louis of the same period. Round the edge,

LA NATION LA LOI ET LE ROI,
The nation, the law, and the King.

The Pieces of 15 and 30 Sols, coined at the same period, bear the same impressions, except that instead of the fasces and cock, their value is marked, and that the motto round the edge is omitted.

The 6 LIVRE Piece of the Republic—The Genius of France, &c. as above. Reverse, a wreath of oak, containing the words SIX LIVRES; legend,

REPUBLIQUE FRANCOISE L'AN II.

and round the edge,

LIBERTE, EGALITE,
Liberty, equality.

The 5 FRANC Piece of the Republic—Three figures, representing Hercules and two young women joining their hands; legend,

UNION ET FORCE,
Union and strength.

Reverse, a wreath of laurel and oak, containing the words 5 FRANCS L'AN 7; legend,

REPUBLIQUE FRANCOISE;

and round the edge,

GARANTIE NATIONALE,
National guarantee.

The 5 FRANC Piece of 1803.—Head of Bonaparte; legend as on the 40 Franc Piece. Reverse, a wreath of laurel, containing the value, 5 FRANCS; legend,

REPUBLIQUE FRANCOISE,

but on pieces coined in 1809,

EMPIRE FRANCOIS.

Round the edge, the words

DIEU PROTEGE LA FRANCE,

as before.

The FRANC of Louis XVIII. bears the same impressions as the 40 Franc Piece of the same period; except the mark of the value.

FRANCFORT ON THE MAINE.

GOLD COINS.

The DUCAT—An eagle, with the legend,

TURRIS FORTISSIMA NOMEN DOMINI,
The name of the Lord is the strongest tower.

Reverse, a cross with ornaments; legend,

DUCATUS REISPUBLICÆ FRANCOFURTENSIS,
Ducat of the Republic of Francfort.

The DUCAT of 1796—View of the city. Reverse, a wreath of laurel surrounding the words

AUS DEN GEFÆSEN DER KIRCHENUND BURGER
DER STADT FRANCKFURT,
Out of the Plate of the Churches and of the Citizens.

SILVER COIN.

The RIXDOLLAR—The impressions of these

coins have varied much; most of them bear an eagle; but the reverses and legends are very different in coins of different dates; they may be easily distinguished, by the word

FRANCKFURT or FRANCOFURT,

which is to be found on some part of the Piece, as also the words

AD NORMAM CONVENTIONIS,
According to the rate of Convention money,

and

X E. F. MARK, or X EINE FEINE MARK,
10 *to a Mark of fine silver.*

These last words within a circle or wreath, form the reverse of the more modern pieces, and coins of 1796 bear likewise the German legend,

AUS DEN GEFÆSEN, &c.

as on the Ducat; and on the obverse, an eagle, and the legend,

DER STADT FRANCKFURT,
Of the city of Francfort.

GENEVA.

Gold Coin.

The Pistole—On Pistoles of an ancient date, a two-headed eagle crowned; on those of modern date, a sun with the letters I. H. S. in the centre; legend,

POST TENEBRAS LUX,
After darkness light.

Reverse, the arms of the city, with a sun over them; legend,

RESPUBL. GENEVEN.
Republic of Geneva.

Silver Coins.

The Patagon or Ecu (old) bears the same impression as the Pistole.

The Piece of 21 Sous—The inscription,

POST TENEBRAS LUX.

and under it 21, the whole surrounded with various ornaments, and surmounted by a sun: reverse, as on the Pistole.

The Ecu of 1794—The head of a woman with a mural crown, legend

REPŪBLIQUE GENEVOISE,
Republic of Geneva;

and under it,

EGALITE, LIBERTE, INDEPENDANCE,
Equality, liberty, independence.

Reverse, two ears of corn, and the inscription

PRIX DU TRAVAIL, L'AN III. DE L'EGALITE,
The prize of labour, the year 3 of equality;

legend,

APRES LES TENEBRES LA LUMIERE,
After darkness light.

But the Ecus coined since that period, bear on the obverse a sun with the letters I. H. S. in the centre, legend,

POST TENEBRAS LUX,

as above, with

XII FLORINS IX SOLS.

Reverse, the arms of Geneva encircled by a wreath of oak; legend,

GENEVE REPUBLIQUE L'AN V. DE L'EGALITE.

The Half Ecu bears the same impressions, except that it is marked within the sun, VI FLORIN IVS. VId.

The Piece of 15 Sols—A sun, with 15 SOLS in the centre; legend,

EGALITE, LIBERTE, INDEPENDANCE.

Reverse, an eagle within a wreath; legend,

POST TENEBRAS LUX.

The Piece of 6 Sols—A wreath containing the words SIX SOLS; legend,

POST TENEBRAS LUX,

Reverse, as on the new Ecu.

GENOA.

Gold Coins.

The Doppia—The Virgin and Child on a cloud, with a sceptre and a crown of stars; legend,

ET REGE EOS,
And govern them;

with the initials of the Doge's name and the date. Reverse, a cross with 4 stars, or flowers, and the legend,

DVX ET GVB. REIP. GENV.

that is, Dux et Gubernator Reipublicæ Genuensis,

Doge and Governor of the Republic of Genoa.

The Pieces of 2, 4, and 5 Doppie, bear the same impressions.

The Sequin—A figure of St. John the Baptist; legend,

NON SVRREXIT MAJOR,
A greater has not arisen.

Reverse, the arms of Genoa with a crown; legend,

DVX ET GVB. REIP. GENV.

as before.

The Genovina—The Virgin and Child, as on the Doppia, and the same legend. Reverse, arms of Genoa with a crown, and the legend DVX, &c. as above. The old Genovine of 100, 50, and 25 lire, and the new ones of 96, 48, and 24 lire, bear the same impressions.

The Four Pistole Piece of the Ligurian Republic—A woman holding a spear and resting on a shield; legend,

REPUBBLICA LIGURE, ANNO I, L. 96.
Ligurian Republic, year 1, 96 *lire.*

Reverse, a wreath of laurel, with the fasces and cap of Liberty; legend,

NELL' UNIONE LA FORZA,
Strength in union;

and round the edge of the piece

PESO GRANI 550, BONTA CAR. 22,
Weight 550 *grains, fineness* 22 *carats.*

Silver Coins.

The Scudo della Croce—Impressions as on the Doppia.

The Scudo di S. Giambatista (old) of 5 Lire—Figure of St. John the Baptist, with the legend as on the Sequin, and the initials of the Doge's name. Reverse, arms of Genoa; legend, DVX, &c. as on the Doppia.

The Scudo of 8 Lire bears the same impressions as the preceding, except that it is marked L. 8 on the reverse, and its divisions L. 4, L. 2, L. 1.

The Madonnina—A whole length figure of the Virgin; legend,

SVB TVVM PRESIDIVM,
Under thy protection;

with the date; and round the figure,

NE DERELINQ. NOS,
Do not forsake us.

Reverse as on the Scudo di S. Giambatista.

The Scudo of the Ligurian Republic—Two figures, representing a soldier and a woman; legend,

LIBERTA EGUAGLIANZA,
Liberty, equality;

and the date. Reverse, arms of Genoa, encircled by a palm and branch of laurel, and surmounted by the cap of Liberty; legend,

REPUBBLICA LIGURE ANNO I, L. 8.

round the edge,

PESO GRANI 726, BONTA ONCIE 10 16
Weight 726 *grains, fineness* 10 *ounces* 16 *deniers.*

HAMBURGH.

Gold Coins.

The Ducat—The inscription,

MON AVR. HAMBVRGENSIS AD LEGEM IMPERII,
Gold coin of Hamburgh, according to the law of the Empire;

and at the top, a city gate with three towers. Ducats of an old date have the gate in the centre, and round it the legend,

MONETA AVREA HAMBVRGENSIS.

Reverse of both, a two-headed eagle crowned, with the name of the reigning Emperor of Germany, thus:

IOSEPHVS II. D. G. ROM. IMP. SEMP. AVGVST.
Joseph II. by the grace of God, Emperor of Rome, ever august.

SILVER COINS.

The RIXDOLLAR (*Specie, or Banco*)—Arms of Hamburgh; legend,

MONETA NOVA HAMBVRGENSIS,
New coin of Hamburgh;

and at the bottom 48 SCHILL. SPEC. Reverse as on the Ducat.

The Piece of 2 MARKS—The arms of the city; legend,

HAMBURGER CURRENTGELD,
Current money of Hamburgh;

and 32 SCHILL. or the legend is,

32 SCHILLING HAMBURGER COURANT.

Reverse as on the Ducat. The Pieces of 1 Mark and under are marked 16 SCHILLING, 8 SCHILLING, &c.

HANOVER.

GOLD COINS.

The GEORGE D'OR—The King's arms; legend,

GEORG. II. D. G. M. B. F. ET H. REX. F. D.

Reverse,

V THALER,
5 Rixdollars of account;

and the date; legend,

BRUNS. ET LUN. DUX. S. R. I. A. T. H. ET ELECT.

as on the English coins, *which see.*

The DUCAT—The King's arms, with his name and all his titles, as on the Guinea. Reverse, a horse at full speed; and on the exergue,

EX AVRO HERC.
From the gold of the mines of Hartz;

and the date. Ducats of an old date have a horse running over rough ground, and the legend,

NEC ASPERA TERRENT,
Neither do rough places deter him.

Other Ducats bear the head, name, &c. of the reigning King; and on the reverse,

1 DUCAT. N. D. R. FUS,
that is, Nach dem reichs fuss,
According to the rate of the Empire,

and the legend,

BRUNS. ET LUN. DUX. &c.

The GOLD FLORIN, or GOLD GULDEN—The King's arms and title. Reverse, the inscription,

1 GOLD GULDEN 2 THALER,

and the letters N. D. R. FU. as on the Ducat; and the same legends.

SILVER COINS.

The RIXDOLLAR—Arms of the reigning King, with his name and title, as in the English coins. Reverse, a horse running over rough ground; legend,

NEC ASPERA, &c.

as above. Some Rixdollars bear on the reverse, a figure of St. Andrew on the cross; legend, the King's German titles.

The PIECE of $\frac{2}{3}$, (fine)—Some of these bear the head of the reigning King; some, a man holding a tree; others the words

24 MARIEN GROSCH.

Reverse, the King's arms; legend, the King's name and titles, as on the Guinea; and under the arms, $\frac{2}{3}$ in an oval, with,

FEIN SILBER,
Fine silver;

and sometimes also N. D. REICHS F. as on the Ducat. The divisions of this piece are marked $\frac{1}{3}$ and $\frac{1}{6}$, and bear in other respects the same impressions.

The PIECE of $\frac{2}{3}$, (base)—The King's head, name, and title. Reverse, $\frac{2}{3}$ in large figures; legend,

18 STUCK EINE MARK FEIN,
18 *Pieces to a Mark fine.*

HESSE CASSEL.

GOLD COINS.

The PISTOLE—Head of the reigning Prince, with his name and titles, thus:

WILHELMUS IX. D. G. HASS. LANDG. HAN. COM.
William IX. by the grace of God, Landgrave of Hesse, Count of Hanau.

Reverse, a star, and within it the legend,

VIRTVTE ET FIDELITATE,
By courage and fidelity;

in the centre, a lion. Other Pistoles, coined in 1794, &c. bear on the reverse a lion at rest, with standards and military trophies, and over this 5 THALER.

SILVER COINS.

The RIXDOLLAR *(Convention)*—Head of the reigning Prince, with name and title as on the Pistole. Reverse, arms of Hesse Cassel; legend,

X ST. EINE FEINE MARK,
10 *Pieces to a Mark fine;*

and at the bottom, the word

IUSTIRT,
Adjusted, or *verified.*

In Pieces of more modern date, (1796, &c.) this last word is not to be found, but under the above legend, the words

BIBERER SILBER,
Silver of the mine of Biber;

and in some pieces of 1770, the words

EX VISCERIBUS FODINÆ BIEBER,
From the bowels of the mine of Biber.

The Half and Quarter Rixdollars are marked XX ST. &c. and 40 ST. &c. and under the arms $\frac{2}{3}$ or $\frac{1}{3}$.

The THALER, or RIXDOLLAR of account—Head, name, and title, as above. Reverse, a star with a lion in the centre, and the words

VIRTVTE ET FIDELITATE,

as before, or the arms of Hesse; the legend, in both, is

EIN THALER,
1 *Thaler;*

and on the Half piece,

EIN HALBER THALER.

HESSE DARMSTADT.

GOLD COINS.

The CAROLIN—Head of the reigning Prince, with name and titles, thus:

ERNEST LVD. D. G. HASS. LANDG. PR. HERSF.
Ernest Louis, by the grace of God, Landgrave of Hesse, Prince of Hirchsfeld.

Reverse, a cross formed by four crowns, and the letters EL four times repeated; in the centre, an X or V, according as it is a Carolin or a Half Carolin; legend,

OCCULTA PATEBUNT,
Hidden things shall be brought to light.

The DUCAT—Head, name, and titles of the reigning Prince. Reverse, arms of Hesse Darmstadt; legend,

SINCERE ET CONSTANTER,
Sincerely and constantly.

HOLLAND.

GOLD COINS.

The RYDER—An armed horseman above the arms of the province; legend,

MO. AUR. PRO. CONFOED. BELG. ZELAND.

that is, Moneta aureæ provinciæ confœderationis Belgicæ Zelandiæ,

Gold coin of Zealand, a province of the Belgic confederacy.

Reverse, arms of the United Provinces, with

14 GL.

14 *Guilders,* or *Florins;*

legend,

CONCORDIA RES PARVÆ CRESCUNT,

Small things increase by concord.

The DUCAT—A foot soldier with a drawn sword, and a bundle of arrows; legend,

CONCOR. RES. PAR. CRES.

as above, and HOL. or ZEL. &c. to distinguish the Province. Reverse, the inscription,

MO. ORD. PROVIN. FŒDER. BELG. AD LEG. IMP.

that is, Moneta ordinarea provinciarum fœderatarum Belgicarum ad legem Imperii,

The common coin of the confederated Belgic Provinces, according to the law of the Empire.

SILVER COINS.

The DUCATOON bears the same impressions as the Ryder, except that the legend instead of MO. AUR. begins with the words

MO. NO. ARG.

Moneta nova argentea,

New silver coin;

and that the value is omitted.

The FLORIN, or GUILDER—A woman leaning on a book which lies on an altar, and holding in the other hand a lance with the cap of Liberty; legend,

HANC TVEMVR, HAC NITIMVR,

This we support, on this we depend.

Reverse, arms of the United Provinces, with 1 G.; legend,

MO. ARG. ORD. FOE. BELG.

that is, Moneta argentea ordinum fœderationis Belgicæ,

The common silver coin of the Belgic confederacy;

and the name of the particular province, marked thus: HOLL. for Holland; ZEL. for Zealand; GEL. & C. Z. for Guelders and the County of Zutphen; WEST F. for West Friesland; TRAJ. (Trajectus) for Guilder Utrecht; TRANSI, for Overyssel; GRON. for Groningen.

The RIXDOLLAR—A soldier with a drawn sword; and in his left hand the arms of the Province; legend,

MO. NO. ARG. &c.

as on the Ducatoon and Ryder. Reverse, arms of the United Provinces, with the date; legend,

CONCORDIA RES, &c.

as on the Ryder.

The RIXDOLLAR of the KINGDOM of HOLLAND—Head of the reigning King, with name and title, thus:

NAP. LODEW. 1 KON. VAN HOLL.

that is, Napoleon Lodewig, I. Konig van Holland,

Napoleon Louis I. King of Holland.

Reverse, arms of Holland, with 50 Ss. (50 *Stivers;*) legend,

KONINGRIJK HOLLAND,

Kingdom of Holland.

LIEGE.

GOLD COIN.

The DUCAT—Head of the reigning Bishop, with his name and some of his titles; and on the reverse, his arms; legend,

LEOD. EP. PR. FR. RAT.

Leodicensis episcopus princeps,

Prince Bishop of Liege, &c.

Ducats coined during an interregnum bear a mitred head, with the legend,

S. LAMBERTUS PATRO. LEOD.

St. Lambert, Patron of Liege.

Reverse, arms of Liege; legend,

DEC. ET CAPLI. LEOD. SEDE VACANTE,
The Dean and Chapter of Liege, the See being vacant.

SILVER COINS.

The silver coins of Liege bear the same impressions as the gold coins. The legend of the Patagons coined during an interregnum is

MONETA NOVA CAPLI. LEOD. SEDE VACANTE,

as above.

The ESCALIN bears on the reverse a lion supporting a small escutcheon, with the legend,

DEC. ET CAPLI, &c.

LORRAINE.

GOLD COINS.

The LEOPOLD—Head of the reigning Prince, with name and title, thus:

LEOP. I. D. G. D. LOT. BAR. REX. IER.

that is, Leopoldus I. Dei gratia, Dux Lotharingiæ et Barri, Rex Ierosolymæ,

Leopold I. by the grace of God, Duke of Lorraine and Bar, King of Jerusalem.

Reverse, arms of Lorraine; legend,

TE DOMINE SPES MEA,
In Thee, O Lord, is my hope.

SILVER COIN.

The LEOPOLD, or ECU—Bears the same impressions as the Gold Leopold, except the legend on the reverse, which is

IN TE DOMINE SPERAVI,
In Thee, O Lord, have I hoped.

LUBEC.

SILVER COINS.

The RIXDOLLAR or 3 MARK PIECE—A two-headed eagle crowned, with 48 on its breast; legend,

MON. NOVA IMP. CIVITAT. LUBECÆ,
New coin of the imperial city of Lubec.

Reverse, arms of the city; legend,

48 SCHILLING COURANT GELDT ANNO, &c.
48 *Schillings currency, the year, &c.*

The DOUBLE and SINGLE MARK are distinguished by the numbers 32 and 16 on the eagle; and on the reverse, above the arms, there are two palm branches surrounding the words 32 SCHILLING or 16 SCHILLING; legend,

COURANT GELDT.

LUCCA.

GOLD COIN.

The DOPPIA—Head of Jesus crowned; legend,

VULTVS SANCTVS,
Holy countenance.

Reverse, arms of the Republic; legend,

RESPUBLICA LUCENSIS,
Republic of Lucca.

SILVER COINS.

The SCUDO—An armed horseman giving his cloak to a beggar; legend,

SANCTUS MARTINUS,
St. Martin.

Reverse, arms of Lucca; legend,

RESPUBLICA LUCENSIS.

The divisions of the Scudo bear the same impressions; but some pieces, instead of the figure of St. Martin, have a crucifix, with the legend

VULTVS SANCTVS,

as above.

The BARBONE—Head of Jesus crowned; legend,

VULTVS SANCTVS.

Reverse, a cross; legend as on the Scudo.

MALTA.

GOLD COINS.

The LOUIS—Head of the reigning Grand-Master, with his name and title, thus:

EMMANUEL DE ROHAN M. M.

that is, Magister Magnus,

Grand-Master.

Reverse, arms of the order and of the Grand-Master in two separate shields, with a crown over them, and

S. 10,

10 *Scudi,* or *crowns;*

legend,

HOSPITALIS ET S. SEPUL. HIERUSA.

Of the Hospital and Holy Sepulchre of Jerusalem.

SILVER COINS.

The OUNCE—Head, name, and title of the Grand Master, as on the Louis. Reverse, arms of the order, mostly borne by an eagle, with

T. 30,

30 *Tari;*

legend and date as on the gold coins. The Half Ounce is marked T. XV. But some Ounces of ancient date, bear a figure of St. John the Baptist, with the legend,

NON SVRREXIT MAJOR,

A greater has not arisen;

and T. XXX. at the bottom. Reverse, arms of the order, with the name and title of the Grand Master.

The SCUDO bears the same impressions as the Ounce, except that there is no legend on the reverse, but the letters S. I. at the bottom, and a wreath of laurel round the arms.

MANHEIM.

GOLD COINS.

The CAROLIN—Head of the reigning Prince, with the name and title, thus:

CAR. PHILIP D. G. ELEC. PALATINUS,

Charles Philip, by the grace of God, Elector Palatine.

Reverse, arms of the Prince, with four crowns, supported by four C's, interlinked and four P's, the whole forming a cross; legend,

MONETA NOVA AUREA PALATI.

New gold coin of the Palatinate.

The PISTOLE—Head of the reigning Prince, with name and title, thus:

CAR. THE. C. P. S. R. I. A. T. & EL.

that is, Carolus Theodorus, Comes Palatinus, Sancti Romani Imperii Archi-Thesaurarius et Elector;

Charles Theodore, Count Palatine, Arch-Treasurer and Elector of the Holy Roman Empire.

Reverse, a crown, formed by four crowns and four cyphers of the letters C. T.; legend,

DOMINUS REGIT ME,

God directs me.

The DUCAT—The same as the Pistole.

SILVER COINS.

The RIXDOLLAR (fine)—Head, name, and title, as on the Pistole. Reverse, arms of the Prince; legend,

EX VISCERIBUS FODINÆ WILDBERG;

From the bowels of the mine of Wildberg,

and

FEIN SILB.

Fine silver.

The PIECE of $\frac{2}{3}$ bears the same impressions as the Rixdollar, except that it is marked $\frac{2}{3}$ under the arms. Some pieces of an ancient date, bear no head but $\frac{2}{3}$ in large figures, and under this,

FEIN SILBER;

legend,

DEUS SERVET METALLI FODINAS MONTENSES,

May God preserve the mines of Wildberg;

the names and titles are on the reverse, round the arms.

The RIXDOLLAR (*Convention*)—Head, name,

and titles as on the Pistole. Reverse, arms of the Prince; legend,

AD NORMAM CONVENTIONIS,
According to the rule of the Convention;

or,

10 EINE FEINE MARCK,
10 *to a fine Mark.*

MECKLENBURG.

Silver Coin.

The Piece of $\frac{2}{3}$—Arms of the reigning Prince, with name and title, thus:

FRIED. FRAN. ZV. G. G. HERZOG ZV. MECKLENB. SCHWERIN,
Frederic Francis, by the grace of God, Duke of Mecklenburg Schwerin.

Reverse, $\frac{2}{3}$ in large figures; legend,

18 STUCK EINE MARCK FEIN,
18 *pieces to a Mark fine.*

MENTZ.

Gold Coin.

The Ducat—Head of the reigning Prince, with name and title, thus:

FRID. CAR. IOS. A. EP. ET EL. MOG. EP. W.
that is, Fredericus Carolus Josephus, Archiepiscopus et Elector Moguntiæ, Episcopus Wormiæ,
Frederic Charles Joseph, Archbishop and Elector of Mentz, Bishop of Worms.

Reverse, arms of the Bishop, with the date; other Ducats bear on the reverse a view of the city of Mentz, with the legend,

AVREA MOGVNTIA,
The golden Mentz.

Silver Coins.

The Rixdollar—Head of the reigning Prince, with name and titles, thus:

FRID. CAR. IOS. D. G. A. E. MOG. S. R. I. P. G. A. C. ET EL. E. W.
that is, Fredericus Carolus Josephus, Dei gratia, Archiepiscopus Moguntiæ, Sancti Romani Imperii pro Germania Archi Cancellarius et Elector, Episcopus Wormensis;
Frederic Charles Joseph, by the grace of God, Archbishop of Mentz, High Chancellor for Germany and Elector of the Holy Roman Empire, Bishop of Worms.

But the pieces of 1796, &c. have their legend in German, thus:

FRID. CAR. IOS. ERZB. V. KVRF. Z. MAINZ. B. Z. W.
that is, Erzbischoff und Kurfurst zu Mainz, Bischoff zu Worms,
Archbishop and Elector of Mentz, Bishop of Worms.

Reverse, arms of the Bishop; legend,

ZEHEN EINE FEINE MARK,
Ten to a Mark fine.

The Copstuck bears the same impressions as the Rixdollar, except that the legend on the reverse is

60 AUF EINE FEINE MARK,

and that it is marked 20 at the bottom.

MILAN.

Gold Coins.

The Sequin—Head of the reigning Emperor of Germany, with name and title, thus:

IOSEP. II. D. G. R. IMP. S. AUG. G. H. ET B. REX. A. A.
Joseph II. by the grace of God, Emperor of Rome, ever august, King of Germany, Hungary, and Bohemia, Archduke of Austria.

Reverse, arms of Milan; legend,

MEDIOLANI ET MANT. DUX,
Duke of Milan and Mantua.

The Doppia, or Pistole—The same as the Sequin.

The Piece of 40 Lire of the new kingdom of Italy—Head of Bonaparte; legend,

NAPOLEON IMPERATORE E RE,
Napoleon Emperor and King.

Reverse, arms of Milan; legend,

REGNO D'ITALIA,
Kingdom of Italy,

and 40 LIRE; round the edge of the piece,

DIO PROTEGGE L'ITALIA,
God protect Italy.

SILVER COINS.

The SCUDO—Impressions the same as the Sequin, except that round the edge of the pieces of Maria Theresa, are the words

JUSTITIA ET CLEMENTIA,
Justice and clemency;

and round those of Joseph II.

VIRTUTE ET EXEMPLO,
By virtue and example.

The LIRA bears the same impressions as the Sequin, except that it is marked UNA LIRA, under the arms: pieces of 30 Soldi of the year 1800 have likewise their values marked.

The SCUDO of the CISALPINE REPUBLIC—An armed woman sitting, and another woman standing before her; legend,

ALLA NAZ. FRAN. LA REP. CISAL. RICONOSCENTE,
To the French Nation, the grateful Cisalpine Republic.

Reverse, a wreath of oak, and within it

SCUDO DI LIRE SEI 27 PRATILE ANNO VIII.
Scudo of 6 Lire, 27th of the month Pratile, year 8;

and round the edge of the piece,

UNIONE E VIRTU,
Union and virtue.

The PIECE of 30 SOLDI of the same Republic—Head of a woman; legend,

REPVBBLICA CISALPINE, SOLDI 30.

Reverse,

PACE CELEBRATA, FORO BONAPARTE FONDATO,
ANNO IX,
Peace proclaimed, foundation of Bonaparte's forum.

SILVER COINS.

The SCUDO—Head of the reigning Prince, with name and title, thus:

HERCVLES III. D. G. MVT. REG. MIR. EC. DVX,
Hercules III. by the grace of God, Duke of Modena, Reggio, Mirandola, &c.

Reverse, arms of Modena; legend, in pieces of 1782,

PROXIMA SOLI,
Next to the Sun;

and in those of 1796,

DEXTERA DOMINI EXALTAVIT ME,
The right hand of the Lord hath exalted me.

NAPLES.

GOLD COINS.

The SIX DUCAT PIECE—Head of the reigning King, with name and titles, thus:

FERDINAN. IV. D. G. SICILIAR. ET HIER. REX,
Ferdinand IV. by the grace of God, King of the two Sicilies and of Jerusalem.

Reverse, arms of Naples; legend,

INFANS HISPANIAR.
Infant of Spain.

The FOUR and TWO DUCAT PIECES bear the same impressions.

SILVER COINS.

The PIECE of 12 CARLINI—Impressions the same as the Six Ducat Piece, and the value marked

G. 120,
120 *grains.*

Pieces coined since 1805, have round the head,

FERDINANDVS IV. D. G. REX;

and on the reverse,

VTR. SIC. HIER. HISP. INF.
that is, Utriusque Siciliæ, &c.
Of both Sicilies, &c.

and round the edge,

PROVIDENTIA OPTIMI PRINCIPI,
The precaution of the best Prince.

The piece of 6 Carlini is marked

G. 60,
60 *grains.*

In 1791, two different pieces were coined bearing the profiles of the King and Queen with their names,

FERDINANDVS IV. ET MARIA CAROLINA.

One of these pieces has on the reverse the sun in the zodiac, with the globe of the earth at the bottom, and the legend,

SOLI REDVCI,
To the returning Sun.

The reverse of the other piece represents a man and a woman making a sacrifice on an altar, behind which is a view of Mount Vesuvius; legend,

PRO FAVSTO PP. REDITV,
For the happy return of our Sovereigns.

The DUCAT bears the same impressions as above, except that it is marked on the reverse

DVCATO NAP. GRA. 100;

and round the edge,

PROPUGNACULA FIRMA ADVERSUS FRAUDATORES,
A firm guard against fraudulent persons.

The Half Ducat is marked

ME. D. NAP. G. 50.

The PIECE of 12 CARLINI of the Republic of Naples—A woman with a spear and cap of Liberty in one hand, and supporting the fasces with the other; legend,

REPUBBLICA NAPOLITANA.

Reverse, a wreath containing the value,

CARLINI DODICI,
12 *Carlini;*

legend,

ANNO SETTIMO DELLA LIBERTA,
The seventh year of liberty.

NETHERLANDS.

GOLD COINS.

The SOUVERAIN.—See *Austrian Dominions.*

The GOLD LION of the revolted Netherlands (1790)—A lion supporting a shield, with the word

LIBERTAS;

legend,

DOMINI EST REGNUM,
The kingdom is the Lord's.

Reverse, a sun, with eleven escutcheons round it, and the legend,

ET IPSE DOMINABITUR GENTIUM,
And he himself shall reign over the nations.

The TEN FLORIN PIECE, and its divisions (1818)—Head of the King, with the legend,

WILLEM KONING DER NEDERLANDEN, GROOT HERTOG VAN LUXEMBURG,
William King of the Netherlands, Grand Duke of Luxemburg.

Reverse, the arms of the King between 10 GL.; legend,

MUNT VAN HET KONINGRYK DER NEDERLANDEN,
Coin of the kingdom of the Netherlands,

and the date. Round the edge,

GOD ZY MET ONS,
God be with us,

SILVER COINS.

The DUCATOON bears the same impressions as the Souverain.

The CROWN of Maria Theresa, and its divisions—A cross and four crowns in the angles. Reverse, a two-headed eagle crowned, bearing on its breast the arms of Austria; the legends consist of the

Empress's name and her titles as on the Souverain; and round the edge,

JUSTITIA ET CLEMENTIA,
Justice and clemency.

The CROWN of the Emperors Joseph, Leopold, and Francis II.—Head of the reigning Emperor. Reverse, a cross and three crowns, the golden fleece supplying the place of the fourth; legends as on the Souverain. Round the edge of the pieces of Joseph II. are the words

VIRTUTE ET EXEMPLO,
By virtue and example;

round those of Leopold,

PIETATE ET CONCORDIA,
By piety and concord;

and round those of Francis II.

FIDE ET LEGE,
By faith and the law.

The SILVER LION of the revolted Netherlands (1790) bears the same impressions as the Gold Lion, except that round the edge is the legend,

QUID FORTIUS LEONE,
What is stronger than the lion?

The FLORIN of the revolted Netherlands—Obverse, a lion. Reverse, two joined hands and eleven arrows, with the mark, 1 FLOR.; legends as on the Silver Lion. Some Florins, however, have the legend,

MON. NOV. ARG. PROV. FOED. BELG.
New silver coin of the confederated Belgic Provinces;

and on the reverse,

IN VNIONE SALVS.
Safety in union.

The FLORIN of 1816 bears the same impressions as the 10 Florin Piece.

PIECES of 25, 10, and 5 CENTS, simply bear a W crowned, and on the reverse, the King's arms between 25 CT. 10 CT. &c.

NEUFCHATEL.

SILVER COINS.

The PIECE of 21 BATZEN—A cross with a sun in the centre; legend,

SUUM CUIQUE,
To every one his own.

Reverse, arms of Neufchatel; legend,

F. G. REX BOR. PR. SUP. NOVIC. & VAL.

that is, Fredericus Guglielmus, Rex Borussorum, Princeps Supremus Novicastelli et Valangini,

Frederic William, King of Prussia, Supreme Prince of Neufchatel and Valangin;

and at the bottom, 21 BZ. The Half-Piece is marked 10½ BZ. The Pieces of 1799, bear the head of the reigning King of Prussia, with his name and titles. Reverse, arms of Neufchatel; legend,

SUUM CUIQUE,

and 21 BZ. as before.

NUREMBERG.

GOLD COINS.

The DUCAT of 1700—A lamb standing on the globe, and carrying a standard with the word

PAX,
Peace;

legend,

TEMPORA NOSTRA PATER DONATA PACE CORONA,
Crown our times, O Father! by giving us peace.

Reverse, three escutcheons and a dove at the top; legend,

RESP. NORIMBERGENSIS SECVLVM NOVVM CELEBRAT,
The Republic of Nuremberg celebrates the new century.

The Double and Half Ducat bear the same impressions.

SILVER COINS.

The RIXDOLLAR *(Constitution)*—Head of the reigning Emperor, with name and title, thus:

CAROLVS VI. D. G. ROM. IMP. SEMP. AUG.
Charles VI. by the grace of God, Emperor of Rome, ever august.

Reverse, a view of the city, with an eagle flying over it; legend,

AVGVSTO DOMINO TVTA ET SECVRA PARENTE EST,
It is safe and secure under its august Lord and Father;

and on the exergue,

NORIMBERGA.

The RIXDOLLAR *(Convention)*—The impressions of these coins vary, some bearing the head, name, and title of the reigning Emperor; and others a view of the city, with a sun over it. Reverse, a two-headed eagle crowned, bearing the arms of the city on its breast; or a single-headed eagle with two escutcheons in its talons. The pieces are marked with the letter N, the word NURNBERG, or the legend,

MONETA NOVA REIPVBL. NORIMBERGENSIS,
New coin of the Republic of Nuremberg;

and the words

X EINE FEINE MARCK.
Ten to a Mark fine.

The COPSTUCK—Arms of the city, with 20 on a pedestal: legend,

MONETA NOVA, &c.

as above. Reverse, the two-headed eagle and arms of the city, with the Emperor's name and title.

PARMA.

GOLD COIN.

The DOPPIA—Head of the reigning Prince, with name and title, thus:

FERDINANDVS I. HISPANIAR. INFANS,
Ferdinand I. Infant of Spain,

and a star at the bottom. Reverse, arms of Parma; legend,

D. G. PARMÆ PLAC. ET VASTAL. DUX,
By the grace of God, Duke of Parma, Placentia, and Guastalla.

SILVER COINS.

The DUCAT and HALF DUCAT bear the same impressions as the Doppia. The pieces of 1, 2, and 3 Lire bear on the reverse a wreath containing their value, thus:

LIRE TRE DI PARMA,
Three Lire of Parma.

PIEDMONT.

GOLD COINS.

The DOPPIA, or PISTOLE (coined before 1785)—Head of the reigning Prince, with name and title, thus:

VIC. AM. D. G. REX SAR. CYP. ET IER.

that is, Victor Amadeus, Dei gratia, Rex Sardiniæ, Cypri, et Ierosolimæ,

Victor Amadeus, by the grace of God, King of Sardinia, Cyprus, and Jerusalem.

Reverse, the arms of Piedmont, Sardinia, &c. legend,

DVX SAB. ET MONTISF. PRINC. PED.

that is, Dux Sabandiæ et Montisferrati, Princeps Pedemontanus,

Duke of Savoy and Montferrat, Prince of Piedmont.

The Half Doppia bears the same impressions.

The DOPPIA and HALF DOPPIA (coined since 1785)—Head of the reigning Prince; legend,

VIC. AM. D. G. REX SARDINIÆ.

Reverse, an eagle crowned, with an escutcheon on its breast, and under it a sceptre and staff with the collar of an order; legend,

PRINC. PEDEM. DVX SABAVD.

But those coined since 1797, bear, on the obverse, only the head and the name, thus:

CAROLUS EMMANUEL IV.

and on the reverse

D. G. REX SAR. CYP. ET IER.

with the crowned eagle.

The CARLINO and Half-Carlino bear the same impressions as the Doppia.

The SEQUIN—An eagle as described above; legend,

CAROLVS EMMANUEL D. G. SARDINIÆ REX.

Reverse, the Annunciation of the Blessed Virgin.

The MARENGO, or PIECE OF 20 FRANCS (1801)—Head of a woman with a helmet; legend,

L'ITALIE DELIVREE A MARENGO,
Italy delivered at Marengo.

Reverse, a wreath containing the words

20 FRANCS L'AN 9;

legend,

LIBERTE EGALITE,
Liberty, equality,

and ERIDANIA, the name that was then given to the country.

SILVER COINS.

The SCUDO, and its divisions, bear the same impressions as the Old Doppia. It may be observed, however, that the coins of an ancient date (before 1714) do not contain the title of King of Sardinia, but only those of Duke of Savoy, Prince of Piedmont, and King of Cyprus. On the coins of Charles Emmanuel IV. the only title retained is, King of Sardinia, Cyprus, and Jerusalem.

The MEZZO SCUDO of the Republic of Piedmont—A soldier, with the fasces and cap of Liberty; legend,

LIBERTA, VIRTU, EGUAGLIANZA,
Liberty, virtue, equality.

Reverse,

MEZZO SCUDO,

within a wreath of oak; legend,

ANNO VII. REP. 1 DELLA LIBERTA PIEMONTESE,
The 7th year of the Republic, the 1st of the Liberty of Piedmont.

The FIVE FRANC PIECE (1801)—Two female figures, one of them with a spear and the cap of Liberty; legend,

GAULE SUBALPINE.

Reverse, a wreath, containing the words

5 FRANCS L'AN 9;

legend,

LIBERTE, EGALITE, ERIDANIA,

as on the Marengo.

POLAND.

GOLD COINS.

The DUCAT (1772)—A full length figure of the King, with name and title, thus:

STANISLAUS AUG. D. G. REX POL. M. D. L.;

that is, Stanislaus Augustus, Dei Gratia, Rex Poloniæ, Magnus Dux Lithuaniæ,

Stanislaus Augustus, by the grace of God, King of Poland, Grand Duke of Lithuania.

Reverse,

MONETA AUREA POLONI. AD LEG. IMPER.
Gold coin of Poland, according to the law of the Empire.

The DUCAT (1791)—Head of the King, with name and titles as above. Reverse, a wreath, containing the words,

AUREUS NUMMUS POLONIÆ ANNO, &c.
Gold coin of Poland, in the year, &c.

SILVER COIN.

The RIXDOLLAR—Head of the reigning King, with name and title, as on the Ducat. Reverse, arms of Poland; legend,

X EX MARCA PURA COLONIEN,
Ten from the Mark fine, Cologne weight.

Round the edge,

PIGNUS FIDEI PUBLICÆ,
A pledge of the public faith.

On the Half Rixdollar is

XX EX MARCA, &c.

and on the new Rixdollar

$14\frac{1}{2}$ EX MARCA, &c.

and at the bottom

G ZL.
G *Zloti,* or *Polish Florins.*

PORTUGAL.

Gold Coins.

The Dobraon—Arms of Portugal; with 20,000 on one side and five flowers on the other; legend,

JOANNES V. D. G. PORT. ET ALG. REX.
John V. by the grace of God, King of Portugal and Algarve.

Reverse, a cross with four M's in the angles; legend,

IN HOC SIGNO VINCES,
By this sign thou shalt conquer.

The Half-Dobraon bears the same impressions, except that it is marked 10,000.

The Moidore—The same as the Dobraon, but is marked 4000, and has four B's in the angles of the cross; but some of an ancient date bear on the reverse a cross, surrounded by four connected semicircles, and a whole circle, with the legend

ET BRASILIÆ DOMINVS ANNO, &c.
and Lord of Brazil, in the year, &c.

The Half and Quarter Moidores are marked 2000 and 1000.

The Joannese—Head of the reigning Sovereign, with name and titles, thus:

JOANNES V. D. G. PORT. ET ALG. REX;

or,

MARIA I. D. G. PORT. ET ALG. REGINA.

The pieces coined by the Prince Regent, since 1804, bear his head, with

JOANNES D. G. PORT. ET ALG. P. REGENS.

Reverse, arms of Portugal. The Dobra, or Double Joannese, and its subdivisions all bear the same impressions.

The Quartinho—Arms of Portugal, with 1000, and the legend

MARIA, D. G. &c.

Reverse, a cross, with four flowers, and the legend

IN HOC SIGNO VINCES,

as before.

The Old Crusado—Head of the reigning King. Reverse, a crown; legend,

JOAN. V. D. G. P. REX.

as before.

The New Crusado—Name of the Sovereign, between two palm branches, surmounted by a crown, and beneath it 400. Reverse, the cross and legend as on the Quartinho.

The Milree, coined for the African colonies,—Arms of Portugal, with 1000 on the side, and the name and title as above. Reverse, a cross, &c. as on the old Moidore; legend,

ET DOMINUS AF. OR. ANNO, &c.

that is, Dominus Africæ Orientalis,

Lord of Eastern Africa.

Silver Coins.

The New Crusado (1795)—The arms of Portugal, on one side of which is the date, and on the other 400; legend,

MARIA I. D. G. PORT. ET ALG. REGINA,

as on the Joannese. Reverse, a cross with four flowers in the angles; legend,

IN HOC SIGNO, &c.

as above.

The NEW CRUSADO (1802)—Same impressions as the Crusado of 1795, except the legend on the obverse, which is

JOHANNES D. G. PORT. ALG. P. REGENS,

as on the Joannese.

The divisions of the New Crusado, that is, pieces of 240, 120, and 60 Rees, bear the same impressions, except that the Half Crusado is marked 200.

The TESTOON—A crown, and under it LXXX, with the reigning Sovereign's name and title; the Half Testoon is marked XXXX, and the Vintem XX. Reverse, a plain cross, with four flowers in the angles; legend,

IN HOC SIGNO VINCES,

as before.

SILVER COINS OF THE PORTUGUESE COLONIES.

The PATACA of BRAZIL—Arms of Portugal, with 640 on the side, and the date near the top; legend, the name and title of the reigning Sovereign as above, with the addition of

BRAS D.

Brasiliæ Dominus, *or* Domina,

Lord or Lady of Brazil.

Reverse, an armillary sphere, placed on a cross; legend,

SVBQ. SIGN. NATA STAB.

that is, Subque Signo nata Stabili,

Born under a steady sign.

There is also a Pataca of 600 Rees bearing the letter J. with a Crown over it, 600 on the side, and the date at the bottom. Reverse, an armillary sphere placed on a cross, with an R in the centre; the legend,

SVB. SIGN. &c.

The PIECE of 12 MACUTAS—Arms of Portugal; legend,

MARIA I. D. G. REGINA P. ET D. GUINEÆ,

Mary I. by the grace of God, Queen of Portugal, and Mistress of Guinea.

Reverse, a wreath of oak, and within it, MACUTAS 12; legend,

AFRICA PORTUGUEZA,

Portuguese Africa.

PRUSSIA.

GOLD COINS.

The FREDERICK—Head of the reigning King, with name and title; thus,

FRIDERICVS BORVSSORVM REX,

Frederick, King of Prussia;

but the coins struck since 1795 have the German legend—

FRIED. WILHELM III. KŒNIG VON PREUSSEN,

Frederick-William, King of Prussia.

Reverse, an eagle with a crown and military trophies.

The DUCAT of ancient date has the same impressions as the Frederick; but those coined in 1787 bear the arms of Prussia, with the reigning King's name and title as above. Reverse, 1 DUCAT, surrounded by a wreath and chain, with four crowns in the angles.

SILVER COINS.

The RIXDOLLAR (coined before 1791)—Head of the reigning King, with name and title, as on the Frederick. Reverse, an eagle and military trophies; legend,

EIN REICHS THALER,

1 *Rixdollar.*

The Half Rixdollar bears the same impressions; and its value is marked thus—

2 EINEN R. THALER,

2 *to a Rixdollar.*

The RIXDOLLAR current (coined since 1791)—Head of the reigning King, and the legend in German, as above. Reverse, arms of Prussia, with

EIN THALER;

but the Rixdollar, Convention money, bears on the reverse the legend—

ZEHN EINE FEINE MARK,
10 *to a Mark fine.*

The FLORIN of SILESIA—Impressions as on the Rixdollar of 1791; but on the reverse it is marked

XXI EINE FEINE MARK.

The PIECE of $\frac{2}{3}$—Arms of Prussia; legend,

FRIED. WILH. KOENIG. V. PR. M. ZU BRAND. D. H. R. R. E. K. U. KURF.

that is, Friederick Wilhelm, Koenig von Preussen Markgraf zu Brandenburg, der Heiligen, Romischen Reichs Erzkammerherr und Kurfust,

Frederick William, King of Prussia, Marquis of Brandenburg, High Chamberlain and Elector of the Holy Roman Empire.

Reverse, $\frac{2}{3}$ in large figures; legend,

18 STUCK EINE MARK FEIN,
18 *Pieces to a Mark fine.*

The Piece of 8 GOOD GROSCHEN—Head, name, and title of the reigning King, as on the Frederick. Reverse, on Pieces of 1756, a military trophy, and above it

8 GUTE GROSCHEN;

on Pieces of 1773, a wreath containing the words

8 EINEN REICHS THALER;

on those of 1791, &c. the arms of Prussia; legend,

DREI, *or* 3, EINEN R. THALER.

The Piece of 4 GOOD GROSCHEN—Head, name, and title of the reigning King, as on the Frederick. Reverse, on Pieces of 1766,

6 EINEN REICHS THALER;

on those of 1791, &c. the arms of Prussia, with

4 GR.

legend,

84 EX MARCA PURA COLON.

84 *Pieces from the Mark fine, Cologne weight.*

The RIXDOLLAR of ANSPACH and BAREUTH—Head of the reigning Prince, with name and title, thus:

ALEXANDER D. G. MARCH. BRAND.
Alexander, by the grace of God, Marquis, or Margrave, of Brandenburg.

Reverse, arms of Anspach, &c. with

ZEHEN EINE FEINE MARK,
10 *to a Mark fine.*

But those of more modern date (1790, &c.) bear the impressions of the Prussian coins, Anspach having been at that period ceded to Prussia.

RAGUSA.

SILVER COINS.

The TALLARO, or RAGUSINA—Head of the chief magistrate called the Rector; legend,

RECTOR REIP. RHAGVSIN,
Rector of the Republic of Ragusa.

Reverse, arms of the city; legend,

DVCAT. ET SEM. REIP. RAC.

that is, Ducatus et semis Reipublicæ Racusinæ,
Ducat and half of the Republic of Ragusa.

Pieces of 1794 bear the head of a woman, with

RESPVBL. RHACVS.
Republic of Ragusa.

Reverse, a shield with the word

LIBERTAS,

surrounded by two branches, over which is a crown; legend,

DVCE DEO FIDE ET IVST.
Under the guidance of God, Faith, and Justice.

The DUCAT—A whole length figure of a Bishop; legend,

AUSPICIIS TUIS A DEO,

From God, under thy auspices.

Reverse, arms of the city; legend,

DUCAT REIP. RHACUSINE.

RATISBON.

GOLD COIN.

The FOUR DUCAT PIECE—The two-headed eagle crowned; legend,

CAROLVS VI. D. G. ROM. IMP. SEMP. AVG.

Charles VI. by the grace of God, Emperor of Rome, ever august.

Reverse, two keys crossed; legend,

MONETA REIPUBLICÆ RATISBONENSIS,

Coin of the Republic of Ratisbon.

SILVER COIN.

The RIXDOLLAR—Head, name, and title of the reigning Emperor, as on the coins of Hamburgh and Nuremberg. Reverse, a view of the city; legend,

MONETA REIP. RATISBON.

as above; and at the bottom,

X ST. EINE F. C. M.

that is, X Stuck eine feine Collnisch Marck,

10 *Pieces to a Mark fine, Cologne weight.*

The Half and Quarter Rixdollars are marked

XX ST. EINE F. C. M.

and,

XL ST. EINE F. C. M.

ROME.

GOLD COINS.

The SEQUIN—A woman representing the church, with rays of glory round her head, sitting on a rock, and holding two keys in one hand, and a temple in the other; legend,

SVPRA FIRMAM PETRAM,

Upon a firm rock.

On some,

FIAT PAX IN VIRTVTE TVA,

Peace be in thy virtue;

and on others of modern date,

AUXILIVM DE SANCTO,

Help from the sanctuary.

Reverse, arms of the reigning Pope, over which are the cross keys and the tiara. The legend is mostly the name of the reigning Pope, as

PIVS SEXTVS PON. MA.

that is, Pontifex Maximus,

Pius VI. Supreme Pontiff,

with the date of his pontificate. Sequins coined during an interregnum have the words

SEDE VACANTE,

The See being vacant.

Sequins of ancient date (as before 1759) have on the reverse a dove surrounded with rays, and their legends are various: the name of the reigning Pope is on the reverse, round the figure of the church.

The impressions on the Sequins of Bologna vary still more than on those of Rome. Such as have been coined since 1786 bear the arms of the reigning Pope, with the keys, tiara, and name, as above; and on the reverse, a bishop seated on a cloud, supported by two small escutcheons; legend,

S. PETRON. BON. PROT.

St. Petronius, Protector of Bologna.

The Double and Half Sequins bear the same impressions; and the pieces of 10 and 5 Sequins are marked

ZECCH. 10,

and

ZECCH. 5.

The DOPPIA or PISTOLE—St. Peter preaching; legend,

PRINCEPS APOSTOLORUM,

Chief of the Apostles.

Reverse, a lily; legend,

FLORET IN DOMO DOMINI,
It blooms in the house of the Lord;

but the new Pistoles (coined since 1800) bear on the reverse the Pope's arms, with the keys and tiara, and his name and the date of his pontificate.

The Pistoles of Bologna bear two escutcheons, and the legend,

BONONIA DOCET,
Bologna teaches.

Reverse, a lily, with the Pope's name, &c. as above.

The SCUDO of the ROMAN REPUBLIC—An eagle, with the legend,

REPUBLICA ROMANA;

on the exergue,

PERUGIA, A. VII.

Reverse, the word SCUDO, encircled by a wreath of oak.

SILVER COINS.

The inupressions and legends of the Silver Coins of Rome are too various to be here described.

They all, however, bear the name of the reigning Pope, and the words

PONT. MAX.

as before; they are mostly distinguished by the cross keys and tiara. The pieces coined during an interregnum have the words

SEDE VACANTE,
The See being vacant;

and commonly a dove, surrounded with rays.

When Rome assumed a republican form of government, in 1798, coins were struck, called SCUDI ROMANI, bearing on the obverse a woman resting on the fasces, and holding in her left hand a lance, with the cap of Liberty; legend,

REPUBLICA ROMANA;

and on the reverse,

SCUDO ROMANO,

encircled by a wreath.

On the restoration of the Papal government, under Pius VII. in 1800, coins were struck, bearing on the obverse the emblem of the church, as on the Sequin; and on the reverse, the arms of the Pope, with his name, title, and the date of his pontificate.

The Silver Coins of Bologna have been subject to the same variations as those of Rome. The word

BONONIA

is to be found on some part of the piece, and sometimes,

BONONIA DOCET.

The pieces coined by the city of Bologna have on the obverse a view of the city, and above it the virgin and child on a cloud; legend,

PRÆSIDIVM ET DECVS,
Protection and Ornament.

Reverse, arms of Bologna; legend,

POPVLVS ET SENATVS BONON.
The People and Senate of Bologna;

and on the exergue

P. 10,
10 *Paoli*,

with the date.

RUSSIA.

GOLD COINS.

The DUCAT—Head of the reigning Emperor or Empress, with the name and titles in Russian characters, which are thus translated:*

Peter, by the grace of God, Emperor, or *Elizabeth, by the grace of God, Empress, and Sovereign of all the Russias.*

The reverse varies; some Ducats of Peter the Great and Elizabeth bear a figure of St Andrew on the cross, without any legend, or with the words

New Coin, Two Rubles;

* The inscriptions on the Russian Coins are all in the Russian language, and are here given literally in English.

those of the Empress Anne bear an eagle and military trophy; legend,

Glory of the Empire;

but most of the Ducats of Peter and Elizabeth, and also those of Catherine II. have on the reverse a two-headed eagle with an escutcheon on its breast, and the words

Sovereign of all the Russias.

The GOLD RUBLE, and also the Double and Half Ruble, bear the same impressions as above; but on the reverse the value is written,

New Coin, Two Rubles, or 1 *Ruble;*

and the Half Piece bears on the reverse the cypher of the Empress Elizabeth, with the word

Poltina,

which means Half a Ruble. These coins as well as the Ducats are now nearly out of circulation.

The IMPERIAL—Head of the reigning Sovereign, with name and title as above; reverse, a cross formed by five escutcheons, with the four figures of the year of coinage in the angles; legend,

Imperial Russian Coin, Value Ten Rubles;

and on the Half Imperial,

Value Five Rubles.

But the Half Imperials of Paul I. have on the obverse the inscription,

Not unto us, not unto us, but unto Thy Name.

Reverse, a cross and four crowns, with a capital I in the centre, and the figure 5 in the angles of the cross.

SILVER COINS.

The RUBLE—Head of the reigning Sovereign, with the name and title as on the gold coins. Reverse, a two-headed eagle crowned, with an escutcheon on its breast; legend,

New Coin, Value 1 Ruble,

or simply,

Coin, 1 Ruble,

and the date. Some Rubles of Peter I. and Catherine I. bear on the reverse a cross and four crowns, with four I's, or four II's in the angles, and the date within the cross.

The Ruble of Paul I. (1799, &c.) bears the same impressions as the Half Imperial of the same period, except that the legend on the reverse is

Coin, Value 1 Ruble,

and that the 5's are omitted in the angles.

The Ruble of Alexander (1802) bears on the obverse the eagle and legend as above; on the reverse,

Coin of the Russian Empire, Ruble,

encircled with a branch of laurel and oak, having a small crown at the top.

The POLTINA, or HALF RUBLE, bears the same impressions as the Ruble, according to the period at which it was coined, except that the inscription contains the word

POLTINA

instead of RUBLE; and the Quarter Ruble is marked

POLUPOLTINICK.

The 20 COPECK PIECE—Head, name, and title of the reigning Sovereign, as above. Reverse, a two-headed eagle, with the number 20 on its breast. The 15 Copeck Piece bears the same impressions, but it is marked 15.

The 10 COPECK PIECE—The two-headed eagle. Reverse,

10 COPECKS.

The 5 COPECK PIECE—A Russian P, with a crown over it, and under which is an I. Reverse,

5 COPECKS,

within two laurel branches.

ST. GALL.

Gold Coin.

The Ducat—Arms of the Abbot, with his name and title, thus:

BEDA D. G. S. R. I. P.

Bede, by the grace of God, Prince of the holy Roman Empire.

Reverse, a bear carrying a short beam, encircled by a palm and laurel branch; legend,

AB. BS. G. E. S. I. A. V. E.

Abbot of St. Gall,

with the initials of particular titles.

Silver Coin.

The Rixdollar bears the same impressions as the Ducat; and also the Half Rixdollar and the Copstuck; but the latter coin is marked 20 on the reverse. Round the edge of the Rixdollar and its divisions, coined since 1780, are the words

FORTITER ET CONSTANTER.

SALTZBURG.

Gold Coin.

The Ducat—Head of the reigning Prince, with name and titles, thus:

HIERONYMVS. D. G. A. & P. S. A. S. L. N. G. PRIM.

that is, Hieronymus, Dei gratia, Archiepiscopus et Princeps Salisburgensis, Germaniæ Primas,

Jerome, by the grace of God, Archbishop and Prince of Saltzburg, Primate of Germany.

Reverse, arms of the Prince. Old Ducats bear on the obverse a full length figure of a bishop, with the legend,

S. RVPERTVS EP. SALISBURG.

St. Rupert, Bishop of Saltzburg.

Reverse, the arms, name, and title, as above.

Silver Coin.

The Rixdollar—The impressions on this coin and its divisions are the same as on the Ducat; and the Copstuck, or 20 Creutzer Piece, differs only in being marked 20 on the reverse.

SARDINIA.

The Coins of Sardinia, both Gold and Silver, bear the same impressions as those of Piedmont; *which see.*

SAXONY.

Gold Coins.

The Ducat—Head of the reigning Prince with name and titles, thus:

FRID. AUGVST. D. G. DVX SAX. ELECTOR,

Frederick Augustus, by the grace of God, Duke and Elector of Saxony.

Reverse, arms of Saxony. In 1808, the title was altered to

FRID. AUGUST. REX. SAXONIÆ,

Frederick Augustus, King of Saxony.

The legend on the obverse of the Ducats of Augustus III. is,

AUGUSTUS III. REX POLONIARUM,

Augustus III. King of Poland;

and on the reverse,

SAC. ROM. IMP. ARCHIM. ET ELECT.

Grand Marshal and Elector of the Holy Roman Empire.

The Augustus bears the same impressions as the Ducat, except that it has on the reverse, under the arms,

5 THALER, or 5 TH.

Silver Coins.

The Rixdollar *(Convention)*—Head, name, and titles of the reigning Prince, as on the Ducat. Reverse, arms of Saxony, with

X EINE FEINE MARCK,

10 *to a Mark fine.*

The FLORIN, or PIECE OF $\frac{2}{3}$, bears the same impressions as the Rixdollar; but the legend on the reverse is

XX EINE FEINE MARCK, $\frac{2}{3}$;

the Half Florin is marked

XL EINE, $\frac{1}{3}$;

and the Quarter Florin,

LXXX. or ACHZIG EINE, $\frac{1}{6}$.

The RIXDOLLAR of SAXE-GOTHA — Head, name, and title of the reigning Prince, thus:

ERNESTVS D. G. GOTHAN. SAXONVM DVX,

Ernest, by the grace of God, Duke of Saxe-Gotha.

Reverse, arms of Saxe-Gotha, with

X EINE FEINE MARCK,

as above.

SICILY.

GOLD COIN.

The OUNCE—Head of the reigning King, with name and title, thus:

CAROLVS D. G. SIC. ET HIE. REX.

Charles, by the grace of God, King of Sicily and Jerusalem:

some pieces have the addition

HIS. IN.

that is, Hispaniarum Infans,

Infant of Spain;

others the word

VNCIA,

Ounce.

Reverse, a phœnix; legend,

RESVRGIT,

He rises again.

SILVER COINS.

The SCUDO or CROWN—Head of the reigning King, with name and title, as on the Ounce. Reverse, an eagle, bearing an escutcheon on its breast; legend,

HISPANIARUM INFANS,

as before. In pieces of ancient date this last title is omitted, and on the reverse are the titles as above. Pieces of the year 1785 have the legend,

ANNO FAVSTO CORONATIONIS,

In the happy year of the Coronation.

The HALF SCUDO—Head of the reigning King. Reverse, a cross; the legends as on the Scudo.

SIERRA LEONE COMPANY.

SILVER COINS.

The DOLLAR, or PIECE of TEN MACUTAS—On the obverse, two joined hands, with the figures 100 both above and under them; legend,

ONE DOLLAR PIECE.

Reverse, a lion; legend,

SIERRA LEONE COMPANY, AFRICA.

The Half Dollar is marked 50; the $\frac{1}{5}$ Dollar, 20; and the $\frac{1}{10}$ Dollar, 10; with the legends,

HALF DOLLAR PIECE;

TWENTY CENT PIECE;

and

TEN CENT PIECE;

the rest as on the Dollar.

SPAIN.

GOLD COINS.

The DOUBLOON, or PISTOLE—Head of the reigning King, with name and title, thus;

CAROL. III. D. G. HISP. ET IND. REX;

that is, Carolus III. Dei gratia, Hispaniarum et Indiarum Rex,

Charles III. by the grace of God, King of Spain and the Indies.

Reverse, arms of Spain within the collar of the golden fleece; legend, in 1740,

INITIUM SAPIENTIÆ TIMOR DOMINI,

The fear of the Lord is the beginning of wisdom;

in 1762,

NOMINA MAGNA SEQUOR,

I follow great names;

in 1763,

IN UTROQUE FELIX AUSPICE DEO,

Happy in both, under the divine auspices;

there is, also, at the bottom, a letter to mark the place where the piece was coined, thus; M. with a crown over it signifies Madrid, and M. with an o Mexico.

The Double, Quadruple, and Half Pistoles bear the same impressions; but, in modern coins, the Half Pistole is marked

1 S.

1 *Scudo, or gold Crown;*

the single Pistole,

2 S.

and the others in proportion. The pieces coined between 1700 and 1723 bear no head, but have the arms and the King's name, with

DEI GRA.

On the reverse, a cross surrounded with different ornaments; legend,

HISPANIARUM REX.

Those coined before that period are not round, but of an irregular shape, and their impressions are very imperfect; the same may be remarked of the old Dollars coined in America.

The DOUBLOON of 1809, and its divisions—Head of Joseph Bonaparte, with the legend,

JOSEPH NAP. D. GR. HISP. ET IND. R.

Reverse, arms of Spain, with a crown; legend,

IN UTROQUE FELIX DEO AUSPICE,

as before.

The CORONILLA, GOLDEN DOLLAR, or VINTEM, bears the same impressions as the Doubloon, except the legends. Those, however, of an ancient date, have on the obverse the King's head and name, with D. G. and on the reverse, the arms of Spain, with

HISPANIARUM REX;

whilst those coined in 1786, &c. have the head and titles on the same side, and the arms of Spain on the reverse.

SILVER COINS.

The DOLLAR (coined before 1772)—On the obverse the arms of Spain, with the initials of the mint, &c. as on the Doubloon, and, also,

8 R.

8 *Reals;*

legend, the name and title of the reigning King. Reverse, a crown resting on two globes, between two pillars; legend,

VTRAQVE VNVM,

Both one,

and the initials of the mint; on the pillars,

NEC PLVS VLTRA,

Nothing beyond.

The divisions of the Dollar bear the same impressions; but the Half Dollar is marked

4 R.

4 *Reals;*

the Quarter Dollar, or Peceta Mexican,

2 R.

and the Real of Mexican Plate,

1 R.

Dollars and other pieces coined before 1740 bear on the obverse the arms, with the King's name, and D. G. Reverse, a sort of irregular escutcheon, divided into four parts by a cross; legend,

HISPANIARUM REX.

The DOLLAR (coined since 1772)—Head of the reigning King, with his name and DEI GRATIA. Reverse, arms of Spain, which, on pieces coined at Mexico, stand between two pillars, on which are the words,

NEC PLUS ULTRA,

as before; legend round the piece,

HISPAN. ET IND. REX,

with an M. for Mexico;

8 R.

8 Reals;

and the initials of the Moneyer's name. These are commonly called Pillar Dollars. Those coined in Europe have no pillars, and the legend is only

HISPANIARUM REX.

SWEDEN.

GOLD COIN.

The DUCAT—Head of the reigning King, with name and title, thus:

GUSTAVUS III. D. G. REX SVECIÆ,

Gustavus III. by the grace of God, King of Sweden;

but on Ducats coined since 1800, the name and titles are in the Swedish language, thus:

GUSTAF IV. ADOLPH. SV. G. OCH W. KONUNG,

Gustavus Adolphus IV. King of Sweden, Gothland, and Westmanland.

Reverse, arms of Sweden; legend, in 1746,

IN DEO SPES MEA,

My hope is in God;

in 1767,

SALUS PUBLICA SALUS MEA,

The public safety is my safety;

in 1774,

FADERNES LANDET,

The land of our fathers;

in 1800,

GUD OCH FOLKET,

God and the people.

SILVER COINS.

The RIXDOLLAR (1752)—Head of the reigning King, with name and title in Latin, as on the old Ducat. Reverse, arms of Sweden; legend,

SALUS PUBLICA SALUS MEA,

as before; and round the edge,

MANIBUS NE LÆDAR AVARIS,

That I may not be hurt by rapacious hands.

The RIXDOLLAR (1779)—Head, name, and title, as before. Reverse, arms of Sweden, with 1 RD. legend,

FADERNES LANDET,

as before. The divisions of the Rixdollar bear the same impressions, but have their value marked. The Rixdollar and other pieces coined since 1795 have the legends on both sides in the Swedish language, as on the new Ducat. Round the edge is

MANIBUS, &c.

as on the old Rixdollar.

SWITZERLAND.

GOLD COINS.

The DUCAT of LUCERNE—Arms of the canton. Reverse,

DUCATUS REIPUBLICÆ LUCERNENSIS,

Ducat of the Republic of Lucerne.

The pieces of 2 and 5 Ducats bear the same impressions.

The DUCAT of SCHWITZ—Arms of the canton, supported by a lion. Reverse,

DUCATUS REIPUBLICÆ SUITENSIS,

Ducat of the Republic of Schwitz.

The DUCAT of URI—A horseman giving his cloak to a beggar; legend,

SANCTVS MARTINVS,

St. Martin.

Reverse, arms of the Canton; legend,

DVCATVS REIPVBLICÆ VRANIÆ,
Ducat of the Republic of Uri.

The PISTOLE of LUCERNE—Arms of the canton, with the legend,

RESPVBLICA LVCERNENSIS.

Reverse, a wreath of laurel, containing

12 MZ. GL.

The PISTOLE of SOLEURE—A warrior bearing a standard; legend,

S. URSUS MARTYR.

Reverse, arms of the city; legend,

RESPUBLICA SOLODORENSIS,
Republic of Soleure.

The Double and Half Pistoles bear the same impressions.

The PISTOLE of the HELVETIC REPUBLIC (1800)—A soldier bearing a standard; legend,

HELVETISCHE REPUBLIK,
Helvetic Republic.

Reverse, a crown of oak, containing

16 FRANKEN.

SILVER COINS.

The ECU of LUCERNE (1715)—A figure of a bishop resting on the arms of the canton; legend,

SANCTVS LEODEGARIVS.

Reverse,

MONETA REIPVB. LVCERNENSIS,
Coin of the Republic of Lucerne;

the whole encircled by a wreath and other ornaments. The Half and Quarter Ecu bear the same impressions, and are marked $\frac{1}{2}$ and $\frac{1}{4}$ on the obverse.

The ECU of LUCERNE (1796)—The arms of the Canton; legend,

RESPUBLICA LUCERNENSIS,

and

40 BAZ.

Reverse, a cross formed by eight L's, and a small wreath in the centre; legend,

DOMINUS SPES POPULI SUI,
The Lord is the hope of his people.

The Half Ecu is marked

20 BAZ.

The GULDEN, or FLORIN of LUCERNE—Arms of the canton; legend,

MONETA NOVA REIP. LVCERNENSIS.

Reverse,

AVXILIO DEI PROSPERE,
Prosperously by the help of God.

The Florin (1793, &c.) and its divisions bear the arms of the canton, with the legend

MON. NOV. &c.

Reverse as on the new Ecu, except that, in the centre of the cross, the Florin is marked

40,
40 *Schillings;*

the Half and Quarter Florins in proportion.

The RIXDOLLAR of FRIBURG—Arms of the canton; legend,

RESPUBLICA FRIBURGENS.

Reverse, a cross formed by eight F's, and four crowns; legend,

AUXILIUM NOSTR. DEUS,
God is our help.

The Quarter Rixdollar has, on a square in the centre of the cross, the number 36, and the inferior divisions are marked 28, 14, and 7.

The Piece of 20 BATZEN of SOLEURE—A cross with an S over it, and sometimes also a large O; legend,

CUNCTA PER DEUM,
All things through God.

Reverse, arms of the canton; legend,

MONETA REIP. SOLODORENSIS, *or* RESPUBLICA SOLODORENSIS, 20 BAZ.

The Ecu of the HELVETIC REPUBLIC (1798)—A soldier bearing a standard; legend,

HELVET. REPUBL. *or* HELVETISCHE REPUBLIK.

Reverse, a wreath of oak, containing the words

40 BATZEN.

But the Ecus of 1799 and 1801 are marked

4 FRANKEN

on the reverse. The pieces of 20, 10, and 5 Batzen have their value expressed on the reverse, and bear in other respects the same impressions as the Ecu.

For the Gold and Silver Coins of BASIL, BERN, GENEVA, NEUFCHATEL, ST. GALL, and ZURICH, *see those articles respectively.*

TREVES.

GOLD COIN.

The DUCAT—Head of the reigning Prince, with name and titles; thus,

CLEM. WENC. D. G. A. EP. TREV. S. R. I. A. C. ET EL.

that is, Clemens Wenceslaus, Dei Gratia, Archi Episcopus Trevirensis, Sancti Romani Imperii Archi Cancellarius et Elector,

Clement Wenceslaus, by the grace of God, Archbishop of Treves, Arch-Chancellor and Elector of the Holy Roman Empire.

Reverse, arms of the Prince; legend, on Ducats of 1773,

EPISC. AUG. APP. COAD. ELEC.
Bishop of Augsburg, &c.

SILVER COIN.

The RIXDOLLAR bears the same impressions and legends as the Ducat, besides which there are, on the reverse, the words,

X EINE MARC F. *or* 10 EINE FEINE MARK,
Ten to a Mark fine.

TURKEY.

GOLD COINS.

As the representation of men and animals is forbidden by the Mahometan law, the Turkish coins have no other impressions than inscriptions stating the names, titles, descent, &c. of the Sultans, with the date of the Hegira, or Mahometan æra.* They are in the Arabic language, and the following translations from the principal coins of Sultan Selim (1789) may serve as a specimen, as there is but little variety in the form or style of these compositions.

The SEQUIN MAHBUB—On the obverse,

Sultan Selim, son of Mustapha Khan, may he be victorious, and his valour be blest, struck at Slambul (Constantinople), in the year 1203;

and on the reverse,

Sultan of the two, lands, and Sovereign of the two seas, Sultan by inheritance, son of a Sultan.

The words, *May he be victorious, and his valour be*

* The Hegira began July 16 in the year 622 of the Christian æra; it is reckoned in lunar years, which are nearly 11 days shorter than the solar, making a difference of about one year in 33. The year 1225, therefore, of the Hegira commenced February 5, 1810, of the Christian æra, and on the

27 September 1821 the year 1237 commences
17 . . . . . 1822 . . . . 1238 . . . . .
6 . . . . . 1823 . . . . 1239 . . . . .

For a full and accurate calculation of these epochs, with tables, see the article *Hegira* in *Rees's Cyclopædia.*

blest, are occasionally used by the Turks at the end of their prayers. By the *two lands* are meant Europe and Asia, and by the *two seas*, the Black Sea and the Archipelago.

The SEQUIN FONDUCLI—On the obverse,

Sultan Selim, son of Mustapha Khan,

and on the reverse,

Struck at Slambul, in the year 1203.

The impressions on Sequins of different periods mostly answer to either of the foregoing descriptions; but the Sequins coined at Cairo, under Sultan Abdulhamid, in 1773, have their inscriptions as follow:

Sultan Abdulhamid, son of Ahmed Khan, may his valour be blest, struck in Egypt, in the year 1187;

and on the reverse, the titles as on the Sequin Mahbub of the Sultan Selim.

The SEQUINS of the BARBARY STATES are coined in the name of the Grand Seignior, and are distinguished by the words

Struck at Tunis, Tripoli, &c.

They bear on the reverse the titles as on the Sequin Mahbub of Selim.

SILVER COINS.

The PIASTRE and other silver coins bear the same inscriptions as the gold coins, and the same differences exist in them. The inscriptions on the Single, Double, and Half Piastres of Selim of 1789 are similar to those on the Sequin Fonducli of this Prince.

The PIASTRE OF TUNIS bears on the obverse the words

Sultan of the two lands, and Sovereign of the two seas, Sultan Selim Khan, blest with victory;

and on the reverse,

Struck at Tunis, in the year, &c.

TUSCANY.

GOLD COINS.

The RUSPONE—A lily, with the name and title of the reigning Prince, thus:

FERDINANDVS III. D. G. A. A. M. D. ETR.

that is, Dei Gratia, Archidux Austriæ, Magnus Dux Etruriæ,

Ferdinand III. by the grace of God, Archduke of Austria, Grand Duke of Tuscany.

Reverse, a figure of St. John the Baptist; legend,

S. JOANNES BAPTISTA.

Some pieces, coined about the year 1738, bear the head of the reigning Prince; legend,

FRANC. III. D. G. LOTH. BAR. ET M. ETR. D. REX HIER.

Francis III. by the grace of God, Duke of Lorraine and Bar, Grand Duke of Tuscany, King of Jerusalem.

Reverse, arms of the Prince; legend,

IN TE DOMINE SPERAVI,

In thee, O Lord, have I hoped.

The NEW RUSPONE of the Kingdom of Etruria bears the same impressions as above; legend on those coined in 1803,

LUDOVICUS I. D. G. HISP. INF. REX ETRVRIÆ,

Louis I. by the grace of God, Infant of Spain, King of Etruria;

and on those struck in 1804,

CAROLVS I. D. G. REX ET M. ALOYSIA R. RECTRIX,

Charles I. by the grace of God, King of Etruria, and Maria Louisa, Queen Regent.

The SEQUIN of TUSCANY bears the same impressions as the Ruspone.

SILVER COINS.

The DUCATONE—Head of the reigning Prince, with name and title, thus:

COSMOS III. D. G. MA. DVX ETRVRI VI.

Cosmos III. by the grace of God, Grand Duke of Tuscany, the 6th year of his reign.

Reverse, St. John baptizing our Saviour; legend,

FILIVS MEVS DILECTVS,
This is my beloved Son.

The LIVORNINA—Head of the reigning Prince, with name and title, thus:

JOAN. GASTO I. D. G. MAG. DVX ETRVRIÆ VII.
John Gaston, &c.

as above. Reverse, the city gate, over which is a crown, and under it,

FIDES,
Faith;

legend,

ET PATET ET FAVET,
It opens and favours.

In pieces of ancient date there is a view of the port of Leghorn with the same legend.

The PEZZA DELLA ROSA—Arms of Tuscany, with the reigning Prince's name and title, as on the Livornina. Reverse, a rose-tree; legend,

VLTIO QVÆSITA GRATIA OBVIA,
Revenge must be sought after, but forgiveness meets.

On the exergue is

LIBVRNE.

The FRANCESCONE — Impressions as on the Ruspone of 1738, to which, in pieces coined since 1740, are added the initials

R. I. S. A.

that is, Romanus Imperator, semper augustus,
Emperor of Rome, ever august.

Reverse, arms of Tuscany on the breast of a two-headed eagle; legend,

IN TE DOMINE SPERAVI,

as on the Ruspone. Pieces struck at Pisa are marked

PISIS.

The LEOPOLDONE — Head, name, title, &c. as on the Ruspone of 1738, with the addition of the initials

P. R. H. ET B.
Prince Royal of Hungary and Bohemia.

Reverse, arms of Tuscany, with the cross of Malta and order of the golden fleece; legend,

DIRIGE DOMINE GRESSVS MEOS,
O Lord, direct my steps.

The SCUDO of the KINGDOM of ETRURIA (1801) — Head of the reigning King, with name and title, thus:

LVDOVICVS I. D. G. HISP. INF. REX ETRVRIÆ PAR. PLAC. ET. PRIN.

Louis I. by the grace of God, Infant of Spain, King of Etruria, Prince of Parma and Placentia.

Reverse, arms of Tuscany, &c. legend,

VIDEANT PAUPERES ET LÆTENTUR,
Let the poor see and rejoice.

The Scudo of 1803 bears the heads of the Infant King and Queen Mother, with their names and titles, thus:

CAROLVS LVD. D. G. REX ETR. ET M. ALOYSIA R. RECTRIX I. I. H. H.

Charles Louis, by the grace of God, King of Etruria, and Maria Louisa, Queen Regent, Infant of Spain.

Reverse, arms of Tuscany, &c. legend,

DOMINE SPES MEA A JUVENTUTE MEA,
O Lord, my hope from my youth,

with

FLORENTIÆ;

round the edge are the words

DIECI LIRE,
10 *Lire.*

The LIRA of 1803 — Arms of Tuscany, &c. legend, the King and Queen's names and titles, as on the Scudo. Reverse,

UNA LIRA,
1 *Lira, or Livre,*

encircled by a wreath.

UNITED STATES OF AMERICA.

Gold Coin.

The Eagle—Head of a woman with the cap of Liberty; legend,

LIBERTY,

with 13 stars. Reverse, an eagle, bearing the arms of the United States on its breast, and a bundle of arrows and an olive-branch in its talons; over its head, are 13 stars and a cloud, and across the neck a scroll, with this legend,

E PLURIBUS UNUM,
One from many;

legend,

UNITED STATES OF AMERICA.

On pieces coined since 1795, the reverse bears an eagle, with a palm-branch in its talons, and a wreath of laurel in its beak.

Silver Coin.

The Dollar and its divisions bear the same impressions as the Eagle, except that the head is without a cap. Round the edge are the words

ONE DOLLAR OR UNIT HUNDRED CENTS;

but the inferior coins have no letters on the edge. On the reverse of pieces of 1795, &c. the Eagle is entirely surrounded with branches of palm and laurel.

VENICE.

Gold Coins.

The Sequin—A man holding a cross and another kneeling before him, with the Doge's name, thus:

LVDO MANIN.

and the letters

S. M. V. M. N. M. T.

one above the other, near the edge of the piece;

that is, Sanctus Marcus Venetus;
St. Mark of Venice;

also, the letters

D. V. X.
Dux,
Duke, or Doge,

placed in the same manner above the kneeling figure. Reverse, a whole length figure of St. Mark, with a book, and surrounded with stars; legend,

SIT T. XPE. DAT. Q. TV. REGIS ISTE DVCA.

This inscription of the Venetian Sequin is the same as that of the Venetian Ducat of 1280, which is thus explained by *Muratori,* in his *Antiquitates Italicæ Medii Ævi,* vol. ii. p. 649.

Sit tibi Christe datum, quod (vel quia) tu regis.
Iste ducatum.

To thee, O Christ, be it (this coin) given, because thou governest (universally). He (St. Mark) governs the Duchy.

This interpretation is doubted even by *Muratori* himself, who supposes that *iste* might have been originally *ipse.* The legend is however curious, as being both an hexameter verse and a monkish rhyme.

The Half and Quarter Sequins bear the same impression, but the legend on the reverse is

EGO SVM LVX MVN.
I am the light of the world.

The Doppia or Pistole—A winged lion, holding a book, with

S. 2;

and the legend,

SANCTVS MARCVS VENETVS,

as on the Sequin. Reverse, a cross, and the Doge's name, thus:

FRANC. CONTARENO DVX VENET,
Francis Contareno, Doge of Venice.

The Scudo d'oro, or Gold Crown bears the same impressions as the Doppia, except that it is marked 140, and the Half Scudo d'oro, 70.

The OSELLA D'ORO—A woman sitting; legend,

PIETAS OPTIMI PRINCIPIS,
The piety of the best Prince,

but the impression varies. Reverse, a wreath, and within it the Doge's name, thus:

PAULI RAINERI PRINC. MUNUS ANNO V.
The gift of Paul Rainier, Prince, the year V. of his government.

The GOLD DUCAT—A man sitting and holding a standard, and another kneeling; legend,

S. M. VEN. LEON. DONAT.
St. Mark of Venice gives a Lion.

Reverse, a winged lion with a book; legend,

DVCATVS REIPUB.
Ducat of the Republic.

SILVER COINS.

The SCUDO DELLA CROCE bears the same impressions as the Scudo d'oro, and the Doppia.

The GIUSTINA—A winged lion, holding a book, and before it a figure with a standard; legend, the name and title of the reigning Doge. Reverse, a woman holding a palm-branch, with a circle over her head, and a sword on her shoulder; background, a view of the sea with ships; legend,

MEMOR ERO TVI JUSTINA VIRG.
I shall remember thee, Virgin Justina,

and

124,
124 *Soldi.*

The DUCAT—A winged lion as before, with a book; legend,

DVCATVS VENETVS,
Venetian Ducat.

Reverse, a figure sitting, and another kneeling and receiving a standard from him; legend,

S. M. V.
St. Mark of Venice,

and the Doge's name, as

PAVL RAINERIVS D.

The Half and Quarter Ducat bear the same impressions; but their legends are

MEDI. DVCAT. VENET.

and

QVAR. DVCAT. VENET.

The LIRAZZA, or Piece of 30 SOLDI — The same as the obverse of the Sequin. Reverse, a woman holding a sword and a pair of scales, with a lion by her side; legend,

JUSTITIAM DILIGITE,
Love justice.

The TALLARO and its divisions—Head of a woman; legend,

RESPUBLICA VENETA,
Republic of Venice.

Reverse, a winged lion and a book; legend, the reigning Doge's name, thus:

PAULO RAINERIO DUCE.

The OSELLA—The impressions on this piece are frequently changed, and are, therefore, too numerous to be here described: the reverse is most commonly the Doge's name, with the date of his government, and also of the Christian era, thus:

LUDOVICI MANIN PRINCIPIS MUNUS. AN. VIII. 1796,

as on the Osella d'oro.

The Piece of 10 LIRE of 1797 — A woman, holding in one hand the cap of Liberty on a lance, and the other resting on the fasces; legend,

LIBERTA, EGUALIANZA,
Liberty, equality;

and at the bottom,

Z. V. *or* ZECCA V.

Reverse, the words

LIRE DIECI VENETE.
Ten Lire of Venice.

encircled by a wreath; legend,

ANNO I. DELLA LIBERTA ITALIANA,
The first year of Italian liberty.

The NEW COINS introduced by the Austrians, viz. Pieces of 2 Lire or 24 Creutzers of 1800 have, on the obverse, a two-headed eagle, crowned, bearing on its breast the arms of Austria; legend,

FRANZ. II. ROM. KAI. KON. ZU. HU. U. BO. ERZH ZU OEST,

that is, Franz. II. Römische Kaiser, König zu Hungarn und Böhmen, Erzherzog zu Oesterreich,

Francis II. Emperor of Rome, King of Hungary and Bohemia, Archduke of Austria.

Reverse, above a palm and laurel branch,

24 KREUTZER ERBLAENDISCH,
24 *Creutzers of the Hereditary States.*

The pieces of 1 Lira and ½ Lira, or 12 and 6 Creutzers, bear the same impressions, except that the legend round the eagle is

KAI. KON. ERBLANDISCHE. SCHEID. MUNZ.
Small coins of the Emperor and King's hereditary States,

and that the value is marked on the reverse. The pieces called *Provincial money,* issued in 1801, bear on the obverse the two-headed eagle, with the letters

F. II.
Francis II.

in an oval, on its breast: legend,

MONETA PROVINCIALE IMP. VENETA,
Imperial provincial coin of Venice.

Reverse, the value of the piece, viz.

DUE LIRE VENETE, UNA LIRA VENETA, *or* MEZZA LIRA VENETA,
2, 1, *or* ½ *Lira of Venice;*

the whole encircled by palm and laurel branches. The coins of 1802 bear, on the obverse, the eagle and arms of Austria, and the name of the Emperor Francis II. and his titles in Latin, as on the Austrian coins, with the addition

D. VENET.
Duke of Venice.

Reverse, the value of the piece.

WIRTEMBURG.

GOLD COINS.

The CAROLIN—Head of the reigning Prince, with name and title, thus:

CAROL. ALEX. D. G. DUX WUR. & T.
Charles Alexander,. by the grace of God, Duke of Wirtemburg, &c.

Reverse, arms of Wirtemburg; legend,

CUM DEO ET DIE,
With God and Time;

and in some,

PER ARDUA VIRTUS,
Valour through difficulty.

The DUCAT—Impressions as on the Carolin, except that the legend on the reverse is

PROVIDE ET CONSTANTER,
Providently and constantly.

SILVER COIN.

The RIXDOLLAR—The impressions are the same as on the Ducat; but the reverse bears, besides the legend, the words

10 EINE FEINE MARCK,
Ten to a Mark fine.

The COPSTUCK—Impressions as on the Ducat, except that the head and the arms are each enclosed in a square, and that under the head there is the number 20.

WURTZBURG.

GOLD COIN.

The DUCAT—Head of the reigning Prince, with

name and titles, thus:

FRANC. LUD. D. G. EP. BAM. ET WIR. S. R. I. P. F. O. DUX;

that is, Franciscus Ludovicus, Dei Gratia, Episcopus Bambergii et Wirtsburgii, Sancti Romani Imperii Princeps, Francorum Orientalium Dux,

Francis Louis, by the grace of God, Bishop of Bamberg and Wurtzburg, Prince of the Holy Roman Empire, Duke of East Franconia.

Reverse, arms of the Bishop; legend,

DUCATUS DUCIS FRANCORUM,
Ducat of the Duke of Franconia.

SILVER COINS.

The RIXDOLLAR (coined before 1795) bears the same impressions as the Ducat, except the legend on the reverse,

10 EINE FEINE MARCK,
Ten to a Mark fine;

but the Rixdollar of 1795, &c. bears on the obverse the head of the Bishop, with name and titles as on the Ducat: and on the reverse only the inscription

10 EINE FEINE MARCK,

encircled by 2 branches of laurel, and above it the legend,

PRO PATRIA,
For the country.

The COPSTUCK—The same as the Rixdollar, according to the period at which it was coined, except that the words on the obverse are

LX. EINE FEINE MARCK,

and that it is marked 20.

ZURICH.

GOLD COIN.

The DUCAT—A lion with a sword, supporting the arms of the city; legend,

DUCATUS REIPUBLICÆ TIGURINÆ,
Ducat of the Republic of Zurich.

Reverse,

DOMINE CONSERVA NOS IN PACE,
O Lord, preserve us in peace.

On the Ducat of 1775 the legend on the obverse is

DUCATUS REIPUBLICA TURICENCIS.

Reverse,

JUSTITIA ET CORCORDIA,
Justice and Concord.

On Double Ducats, the arms are supported by two lions, and on some Half Ducats, the words on the reverse are only

ANNO DOMINI.

SILVER COINS.

The ECU or RIXDOLLAR of 1753—A view of the city; legend,

DOMINE CONSERVA NOS IN PACE,

as on the Ducat. Reverse, a lion supporting the arms of the Canton; legend,

MONETA REIPVBLICÆ TIGVRINÆ.

The Half Ecu has no legend over the city, but only the word

TIGURUM.
Zurich;

and it is marked $\frac{1}{2}$ on the reverse.

The ECU of 1761—On the obverse, the legend

DOMINE, &c.

and the date, surrounded by various ornaments. Reverse, a lion, &c. as above.

The ECU of 1773—The inscription

JUSTITIA ET CONCORDIA,

and the date; the whole surrounded by various ornaments. Reverse, as before.

The Ecu of 1790—A view of the city, with the legend—

DOMINE, &c.

Reverse, arms of the Canton; legend,

MONETA, &c.

as before.

The Ecu of 1794—Arms of the Canton; with the legend—

MONETA, &c.

Reverse, the inscription

XI. AVF. I. FEINE MARK,
11 *to a Mark fine,*

encircled by a wreath. On the Half Ecu, or Florin, the words are

XXII. AVF. I. FEINE MARK;

and on the Half Florin

XX. SCHILLING.

EAST INDIES.

Gold Coins.

The East India Coins, like those of Turkey, have in general no other impressions than inscriptions, setting forth the names and titles of the Sovereigns, with dates and other particulars, which are all in the Persian language.

The following are translations from the principal Indian coins both of gold and silver.

The Mohur, or Gold Rupee (coined under the reign of the Emperor Shah Allum, which began in 1770) has on one side,

He who is the shadow of God's favour, the protector of the religion of Mahomet, the Emperor Shah Allum, coins money for the seven climates,

with the date of the Hegira. On the other side,

Struck at —— the year —— from the happy accession.

Some Mohurs have only, on one side,

Coin of the Emperor Shah Allum,

with the date of the Hegira; and on the other the year of the reign. The coins struck by the East India Company bear the name of the Mogul Emperor, and those minted of late years (as mentioned in the article *East Indies*, vol. i.) are dated the 19th year of the Emperor's reign, and the number 19 is visible on some part of the piece.

The Mohur of Tippoo—On one side,

The faith of Mahomet, the most excellent in this world, is supported by the splendour of the victories of Hyder. Hyder! exalted in equity; struck at Seringapatam, the year pre-eminent in prosperity;

with the date of the Hegira. On the other side,

He alone is the equitable Sultan; the epoch of the accession was a year of happy omen,

with the date of the reign. Some of Tippoo's coins are dated according to an Indian era which is divided into cycles of 60 years each, of which cycles 81 are supposed to be now elapsed.

The Faruki, or Quarter Mohur of Tippoo has on one side,

Mahomet! He is the only and right Sultan,

with the date; and on the other side,

Faruki, struck at Pattan, (Seringapatam,)

with the date of Tippoo's reign, and a Persian H. the initial of Hyder.

The Pagoda—These Pieces differ in shape from all European coins: they have a convex side, with prominent dots; and a flat side, which generally bears a figure, and in some three figures, of Indian idols.

The Star Pagoda is marked on the convex side with a star; other Pagodas are marked with a crescent, or with an initial letter; the Pagodas of Masulipatam and Pondicherry have nothing on the convex side but the dots. Tippoo's Pagodas have no figures on the flat side, but a legend, which is translated thus:

Mahomet! He is the power of equity.

with the date of the Hegira; on the convex side, the name of the place where it was coined, and generally the initial of Hyder.

The MOHUR of the DUTCH EAST INDIA COMPANY—On one side,

Coin of the Company of Holland;

above which is a cock, and under the legend the date of the Christian era; on the other side, the words,

In the great Island of Java.

The JAPAN COPANG is a flat oblong piece, one side of which is marked with transverse lines, and some characters; on the other side, there is in the centre a small circle in which is a mark of the inspector-general of the mint, and in other parts various marks, made by persons who have assayed the piece.

The ZODIACAL RUPEES are pieces of twelve different impressions, representing the twelve signs of the Zodiac. They were coined between the years 1616 and 1624 of the Christian era, by *Jehangeer*, and have been long out of circulation. They are, however, much sought after, and highly valued as objects of curiosity. Each sign, or figure, is surrounded by rays representing the sun; and on the reverse is the following inscription:

This ornamented Coin in Agra, found its face, (received its impression) *in the year —— from the Sovereign Jehangeer, son of King Akber.*

The Zodiacal Rupees are exceptions to the Mahometan law which forbids the representation or embossment of figures, but it is said that Jehangeer had little respect for his religion; and it is further stated by some writers that his favourite queen *Nour-Mahal* had obtained permission to reign for one day, (others say for one year,) and that she caused these coins to be struck to perpetuate the memory of her short reign. This account, however, cannot be quite correct, as the dates of these Rupees are different.

SILVER COINS.

The SICCA RUPEE—The legends on this coin are nearly the same as on the Mohur, and may be thus translated:—

Struck in the seven climates, (date of the Hegira,) *by the shadow of God's favour, Shah Allum, King, disciple in the faith of Mahomet;*

and on the other side,

Struck at —— in the 19th year of the august and glorious reign of the Emperor, &c.

Some Rupees do not bear the date of the Hegira, but only that of the Emperor's reign; and all the Rupees struck in Bengal of late years, at the Company's mint, have been dated the 19th year of his reign, as above noticed.

The ARCOT RUPEE—On one side,

Blessed coin of the conquering King (the name);

on the other side,

Struck at Arcot in the year —— of the reign,

and the date of the Hegira. But it may be observed that in these and many other Rupees, (except such as are coined by the East India Company,) the legends are often illegible, owing to the edge being clipped or worn, or to the piece having been originally too small to receive the impression.

The RUPEE of the DUTCH EAST INDIA COMPANY—On the obverse,

Coin of the Company of Holland,

and the date of the Christian era. Reverse,

In the great Island of Java.

The GULDEN of the DUTCH EAST INDIA COMPANY—The impressions correspond with those of the Gulden of the Netherlands (of 1818), except that the Piece of Java has the letters

N. O.

next to the Statute on one side; and on the other,

MO. ARG. REG. TOT. BELG. JAV.

that is, Moneta argentea Regni totius Belgicæ Javæ,

Silver Coin of the whole Kingdom of Belgium and Java.

The SULTANEE RUPEE of TIPPOO bears the same impressions and legends nearly as Tippoo's Mohur.

The RUPEE of PERSIA, or Piece of 10 MAMOODIS—The legends on these coins vary. Some bear the Sovereign's name, as

Sultan Shahvokh;

and on the other side,

May God prolong his reign, coined at ——,

the name of the place and date of the Hegira. On other Rupees, the King of Persia styles himself

The servant of the Monarch of the Empire,

that is of the *Iman Riza,* the head of their religion, whom the Persians consider as the real Sovereign of their Empire, and the coins are often struck in the name of the Iman Riza, with this legend,

By the divine decree, the coin of happy omen has been struck in the name of Ally Riza, son of Musa;

and on the other side,

There is no God but God, Mahomet is the Apostle of God, Ally is the favourite of God, struck at ——;

with the date of the Hegira.

The SILVER FANAM of PONDICHERRY bears on one side several fleurs de lys, and an inscription on the other.

The LARIN—This is a Silver wire, about an inch in length, doubled up, and flattened on the inner side to receive the impressions of some characters. It was first made in Arabia; and has become scarce, but is still used as a money of account.

The foregoing translations of the Persian and Indian inscriptions and legends are chiefly taken from M. BONNEVILLE'S Treatise on Coins, who states his authorities to be *Messrs. De Sacy,* and *Langles;* and *Mr. Alexander Hamilton* of Calcutta. The translations from the Turkish Coins have been supplied for this Work by Mr. Duc, formerly Secretary to the Turkish Ambassador in London; and the several translations from the Russian, Norwegian, and Swedish Coins have been likewise supplied by good authorities.

TABLES,

CONTAINING A

COMPARISON OF THE WEIGHTS AND MEASURES

OF ALL TRADING COUNTRIES,

Chiefly from actual Experiments made at the London Mint on Foreign Standards, transmitted to England in 1818 *by the British Consuls abroad, and previously verified by the proper Authorities in each Country.*

THE following Tables are, for the most part, a recapitulation of what has been given in the first Volume of this work; but the places here are more numerous; and these Tables also afford a more convenient and ready reference to any subject for which they may be consulted.

Table I.—Contains the Troy Weight of different nations, that is, the Weight chiefly used for the precious Metals. It shews the Weight of each Mark, &c. in English Troy Grains and in French Grammes; also the proportion which each Mark, &c. bears to 100 lb. English Troy.

Table II.—Contains the Commercial Weights of different countries compared with English Avoirdupois; also the Weight of each foreign Pound, Ounce, &c. in English Troy Grains and in French Grammes.

Table III.—Contains the Corn Measures of different countries. It shews the contents of each measure in English Cubic Inches, in English Bushels, and in French Litres; also the number of measures of each place that correspond to 1 English Quarter.

Table IV.—Contains the Liquid Measures of different nations. It shews the contents of a single measure of each sort in English Cubic Inches, in English Wine Gallons, and in French Litres; also how many Gallons, &c. of each place are equal to 100 English Gallons.

Table V.—Is a comparison of the Cloth Measures of different nations. It shews the length of each measure in English Inches and in French Decimetres ; also the number of Ells, Aunes, &c. of each place that correspond with 100 English Yards.

Table VI.—Contains the Long Measures of different Countries. It shews the length of each measure in English Inches and in French Decimetres ; also the number of Feet, &c. of each place that correspond with 100 English Feet.

Table VII.—Shews the contents of the Square Foot of different countries in English Square Inches and in French Square Decimetres.

Table VIII.—Shews the contents of the Cubic Foot of different countries in English Cubic Inches and in French Decilitres.

Table IX.—Contains the Land Measures of different nations. It gives the area of each measure in English Square Yards and in French Ares; also the number of Acres, &c. of each place that equal 10 English Acres Statute Measure.

Table X.—Gives the length of the itinerary measures of different countries in English Yards and in French Metres ; also the proportion of the foreign League, &c. to 100 English Miles.

Table XI.—Contains the new Weights and Measures of France, with their proportion to those of England.

Table XII.—Contains an account of Ancient Weights and Measures, with their proportion to the Weights and Measures of England.

Rules and Examples are also given for finding the proportion between the Weights or Measures of any two or more places contained in the Tables.

TROY WEIGHT.

TABLE I.

Containing a Comparison of the Troy, or Gold and Silver Weights of different Countries; and shewing the Weight of a single Pound, Mark, Ounce, &c. in English Troy Grains and in French Grammes; also, the number of Pounds, Marks, Ounces, &c. of each place, that are equal to 100lbs. English Troy.

		Weight of a single lb. Mark, &c.		Number equal to 100 lbs. English Troy.
		Eng. Grains	Fr. Grammes.	
Aleppo	Metical	73	4,729	7890,410
Algiers	Metical	73	4,729	7890,410
Augsburg	Mark	3643	236,037	158,111
Bassora	Miscal	72	4,665	8000,000
Bengal	Sicca	179,6	11,636	3207,126
Berlin	Mark	3608	233,769	159,645
Bern	Mark	3810,3	246,877	151,117
Bologna	Libbra	5586	361,957	103,114
Bombay	Tola	179	11,597	3217,877
Breslau	Mark	3158	204,613	182,393
Cairo	Rottolo	6654	431,125	86,564
Calicut	Miscal	69	4,470	8347,826
China	Tale	579,8	37,566	993,446
Cologne	Mark	3608	233,769	159,645
Constantinople	Chequee	4957	321,173	116,199
Cracow	Mark	3069	198,846	187,683
Cyprus	Occa	1957	126,797	294,327
Damascus	Ounce	460	29,804	1252,173
Denmark	Mark	3633	235,389	158,546
England	Pound	5760	373,202	100,000
Florence	Libbra	5240	339,542	109,923
France	Poids de Marc	3777,5	244,751	152,481
	Kilogramme	15434	1000,000	37,320
Gamron	Miscal	71,6	4,639	8044,692
Geneva	Mark	3785	245,231	152,179
Genoa	Libbra	4891,5	316,963	117,755
Germany	Cologne Mark	3608	233,769	159,645
Gothenburg	Gold Weight	6854	444,084	84,038
	Silver Weight	6555,5	424,743	87,865
Hamburg, Hanover	Cologne Mark	3608	233,769	159,645

		Weight of a single lb. Mark, &c.		Number equal to 100lbs. English Troy.
		Eng. Grains.	Fr. Grammes.	
Holland	Mark, Old Weight	3798	246,080	151,658
	New Pound, Netherlands	15434	1000,000	37,320
Konigsberg	Mark	3023,5	195,898	190,507
Leghorn	Libbra	5240	339,510	109,923
Liege	Pound	3797,2	246,028	151,691
Madeira	Mark	3538,2	229,250	162,794
Madras	Star Pagoda Weight	52,5	3,401	10971,428
Malta	Libbra	4886,6	316,617	117,873
Milan	Mark	3627	235,033	158,808
Mocha	Vakia	478	30,970	1205,020
Munich	Mark	3609,8	233,891	159,565
Naples	Libbra	4950	320,760	116,363
Nuremberg	Mark	3670	237,786	156,948
Pegu	Tical	237,3	15,375	2427,307
Persia	Derham	151,1	9,790	3812,297
Portugal	Mark	3541,5	229,460	162,642
Prague	Mark	3916	253,725	147,088
Prussia	Mark	3609	233,834	159,600
Ratisbon	Crown Weight	6630	429,592	86,877
	Ducat Weight	3449	223,507	167,004
	Silver Weight	3797,2	246,028	151,691
Reval	Mark	3326	215,498	173,180
Riga	Mark	3226	209,018	178,548
Rome	Libbra	5234	339,121	110,049
Russia	Pound	6318,5	409,388	91,161
Smyrna	Chequee	4957,5	321,206	116,187
Spain	Mark	3550,5	230,043	162,230
Stockholm	Mark	3250	210,574	177,230
Tripoli	Metical	73,6	4,768	7826,086
Tunis	Metical	60,7	3,932	9489,291
Turin	Mark	3795,7	245,935	151,750
Valencia	Mark	3557,6	230,504	161,906
Venice	Mark	3681,5	238,531	156,457
Vienna	Mark	4333	280,743	132,933
Warsaw	Mark	3113	201,697	185,030
Wilna	Mark	3006	194,764	191,616
Zurich	Mark	3616,9	234,346	159,252

AVOIRDUPOIS WEIGHT.

TABLE II.

Containing a Comparison of the Commercial Weights of different trading Places: the first Column shews the Weight of a single Pound, &c. in English Troy Grains; the second, the Weight in French Grammes; the third, the Number of Pounds, &c. of each Place that are equal to 100 *lbs. Avoirdupois; and the fourth, the Number equal to a Hundred Weight.*

		Weight of a single lb. Rottolo, &c.		Number equal to 100lb. Avoirdupois.	Number equal to 112lb. Avoirdupois.
		Eng. Grains.	Fr. Grammes.		
Abyssinia	Rottolo	4800	311,001	145,833	163,333
Aix la Chapelle	Pound	7234	468,705	96,765	108,377
Aleppo	Rottolo of 720 Drams	35190	2280,030	19,891	22,277
	Ditto 700	34212	2216,663	20,460	22,915
	Ditto 680	33235	2153,362	21,062	23,589
	Ditto 600	29325	1900,025	23,870	26,734
	Okè 400	19550	1266,683	35,805	40,102
Alexandria	Rottolo Forfori	6542	423,869	107,000	119,840
	..... Zaydini	9345	605,481	74,906	83,895
	..... Zauri	14485	9385,121	48,325	54,124
	..... Mine	11682	7569,001	59,921	67,111
Algiers	Rottolo	8330	539,717	84,033	94,116
Alicant	Heavy Pound	7983,9	517,292	87,676	98,197
	Light Pound	5322,9	344,881	131,509	147,290
Amsterdam	Pound, old Weight	7625	494,090	91,803	102,819
	Pound Flemish	15434	1000,000	45,354	50,796
Ancona	Libbra	5093,9	330,043	137,419	153,909
Arragon	Libra	5398	349,799	129,677	145,238
Augsburg	Heavy Pound	7580	491,112	92,348	103,429
	Light Pound	7295	472,657	95,956	107,459
Barcelona	Libra	6174	400,025	113,378	126,974
Basil	Livre, Poids de Marc	7555	489,503	92,653	103,771
Bassora	Vakia Tary	8312,5	538,583	84,210	94,315
Bergamo	Libbra Peso Grosso	12588,8	8156,535	55,605	62,277
	..... Peso Sottile	5035	326,227	139,026	155,709
Bergen	Pound	7716	499,935	90,720	101,606
Berlin	Pound	7231	468,510	96,805	108,421
Bern	Pound	8060	522,223	86,848	97,269
Betelfagui	Maund	14273	9247,762	49,043	54,928
Bilboa	Heavy Pound	11037	7151,093	63,423	71,033

		Weight of a single lb. Rottolo, &c.		Number equal to 100lb. Avoirdupois.	Number equal to 112lb. Avoirdupois.
		Eng. Grains.	Fr. Grammes.		
Bilboa	Light Pound	7560	489,827	92,592	103,703
Bologna	Libbra	5586	361,957	125,31	140,347
Bolsano	Heavy Pound	7731,5	500,939	90,538	101,402
	Light Pound	5103	330,633	137,174	153,635
Bremen	Pound	7690	489,250	91,027	101,950
Breslau	Pound	6255	405,273	111,910	125,339
Brunswick	Pound	7206	466,891	97,141	108,798
Cairo	Rottolo	6650	430,866	105,263	117,894
Canary Islands	Libra	7103,6	460,256	98,541	110,366
Candia	Rottolo	8143	527,601	85,963	96,278
Cassel	Pound	7501	486,004	93,320	104,518
China	Catty	9333	604,703	75,002	84,002
Coburg	Pound	7869	509,841	88,956	99,630
Cologne	Pound	7216	467,539	97,006	108,646
Constance	Pound	7285	472,009	96,087	107,617
Constantinople	Oke	19830	1284,825	35,300	39,536
Copenhagen	Pound	7720	500,194	90,673	101,553
Corsica	Pound	7565,6	490,190	92,524	103,626
Cremona	Libbra	5060	327,847	138,339	154,939
Cyprus	Rottolo	36708	2378,384	19,069	21,357
Damascus	Rottolo	27562,5	1785,829	25,396	28,443
Dantzic	Pound	7231	468,510	96,805	108,421
East Indies	*(See Vol. I. p.* 122)				
Elsinore	Pound	7720	500,194	90,673	101,553
Embden	Pound	7668	496,825	91,288	102,242
England	Pound	7000	453,544	100,000	112,000
Erfurt	Pound	7285	472,009	96,087	107,617
Ferrara	Libbra	5338	345,859	131,135	146,871
Fiume	Funti Weight	8623	558,701	81,178	90,919
Florence	Libbra	5240	339,510	133,587	149,609
France	Livre, Poids de Marc	7555	489,503	92,653	103,771
	Kilogramme	15434	1000,000	45,354	50,796
	Livre Usuelle	7717	500,000	90,708	101,593
Francfort	Pound	7210	467,150	97,087	108,737
Galicia	Libra	8892,5	576,122	78,718	88,164
Geneva	Heavy Pound	8498	550,602	82,372	92,256
	Light Pound	7081,6	458,831	98,847	110,709
Genoa	Libbra Peso Grosso	5381	348,645	130,087	145,697
	Libbra, Peso Sottile	4892	316,962	143,090	160,261
Hamburg	Pound	7476	484,384	93,633	104,868
Hanover	Pound	7511	486,652	93,196	104,378
Japan	Catty	9100	589,607	76,923	86,153
Konigsberg	Pound	7231	468,510	96,805	108,421

		Weight of a single lb. Rottolo, &c.		Number equal to 100lb. Avoirdupois.	Number equal to 112lb. Avoirdupois.
		Eng. Grains.	Fr. Grammes.		
Leghorn	Libbra	5240	339,510	133,587	149,609
Leipsic	Pound	7206	466,891	97,141	108,798
Libau	Pound	6449	417,843	108,543	121,568
Liege	Pound	7330	474,925	95,497	106,956
Lubec	Pound	7479,5	484,612	93,589	104,819
Lucca	Libbra, Peso Grosso	5763,8	373,448	121,447	136,020
	Libbra, Peso Sottile	5213	337,770	134,279	150,392
Luneburg	Pound	7540	488,531	92,838	103,978
Lyons	Livre, Poids de Soie	7087,5	459,213	98,765	110,617
	Livre, Poids de Table	6615	428,599	105,820	118,518
Madeira	Libra	7076,5	458,500	98,919	110,789
Majorca	Rottolo	6174	400,026	113,378	126,983
Malta	Rottolo	12216	791,499	57,302	64,178
Manheim	Pound	7638	494,881	91,647	102,644
Mantua	Libbra	4871	315,602	143,707	160,952
Marseilles	Livre, Poids de Table	6296	407,950	111,181	124,523
Mecca	Rottolo	7144	462,874	97,984	109,742
Mecklenburg	Pound	7458	483,218	93,859	105,122
Milan	Libbra, Peso Grosso	11774	762,861	594,530	665,874
	Libbra, Peso Sottile	5044	326,811	138,778	155,431
	Libbra Nuova	15434	1000,000	45,354	50,796
Modena	Libbra	4931,5	319,521	141,944	158,977
Morocco	Pound	8330	539,717	84,033	94,117
Munich	Pound	8656	560,839	80,868	90,572
Munster	Pound	7353	476,415	95,199	106,623
Naples	Cantaro Grosso	13755	891,214	50,890	56,997
	Cantaro Piccolo	7420	480,756	94,339	105,660
Netherlands	New Pound	15434	1000,000	45,354	50,796
Neufchatel	Livre, Poids de Marc	7555	489,503	92,653	103,771
	Livre, Poids de Fer	8029	520,215	87,184	97,646
Nice	Livre	4809	311,584	145,560	163,027
Nuremberg	Pound	7870	509,913	88,945	99,618
Oldenburg	Pound	7476	484,384	94,633	104,868
Oran	Rottolo	7775	503,758	90,032	100,835
Ormus	Seer	4675	302,902	149,732	167,699
Osnaburg	Pound	7625	494,039	91,803	102,819
Oviedo	Libra	10651	6900,996	65,721	73,607
Padua	Libbra, Peso Grosso	7388,5	478,715	94,742	106,111
	Libbra, Peso Sottile	5250	340,158	133,333	149,333
Parma	Libbra	5038	326,422	138,944	155,617
Patras	Pound	6168	399,637	113,488	127,106
Pernau	Pound	6430	416,612	108,864	121,927
Persia	Batman of Cherray	88771	5751,692	78,854	88,316

		Weight of a single lb. Rottolo, &c.		Number equal to 100lb. Avoirdupois.	Number equa to 112lb. Avoirdupoi.
		Eng. Grains.	Fr. Grammes.		
Persia	Batman of Tauris	44385,5	2875,846	157,709	176,634
Poland	Cracow Pound	6250	404,950	112,000	125,440
	Warsaw Pound	5832	377,866	120,027	134,430
	New Pound	6236	404,043	112,251	125,721
Portugal	Arratel	7083	458,921	98,828	110,687
Prague	Pound	7940	514,448	88,161	98,740
Prussia	Pound	7218	467,668	96,979	108,617
Ragusa	Oke	20671	1339,315	33,864	37,927
Ratisbon	Pound	8777	568,679	79,753	89,323
Ravenna	Libbra	4623	299,533	151,417	169,587
Reggio	Libbra	5092	329,921	137,470	153,966
Reval	Pound	6652	430,996	105,231	117,858
Riga	Pound	6452	418,038	108,493	121,512
Rome	Libbra	5234	339,121	133,741	149,790
Rostock	Pound	7852	508,746	89,149	99,846
Rotterdam	Pound	7625	494,039	91,803	102,819
	Light Pound	7243	469,288	96,645	108,242
Rouen	Livre, Poids de Vicomté	8241	533,957	84,941	95,134
Russia	Pound	6318,5	409,388	110,785	124,079
St. Gall	Heavy Pound	9016	584,164	77,640	86,956
	Light Pound	7175	464,882	97,561	109,268
Saltzburg	Pound	8642	559,932	80,999	90,718
Sardinia	Libbra	6125	396,851	114,285	127,999
Sayde	Rottolo of 600 Drams	28742	1862,251	24,355	272,776
	Rottolo of Acre	33740	2186,082	20,746	23,236
Scotland	Pound, Dutch Weight	7600	492,419	92,105	103,157
Sicily	Rottolo Grosso	13475	8730,720	51,948	58,181
	Rottolo Sottile	12250	7937,020	57,143	64,000
	Libbra	4900	317,481	142,857	159,999
Sienna	Libbra	6904	447,324	101,390	113,556
Smyrna	Oke	19830	1284,825	35,300	39,536
Spain	Libra	7101	460,088	98,577	110,406
Stettin	Pound	7219	467,733	96,966	108,602
Stralsund	Old Livre	7460	483,348	93,833	105,092
Strasburg	Livre	7266	470,778	96,339	107,899
Sweden	Pound, Victualie Weight	6563	425,229	106,658	119,456
	——— Miners' Weight	5801	375,858	120,668	135,148
	——— Uppstads or Inland Town Weight	5526	358,040	126,673	141,874
	——— Metal or Staplestad Weight	5250	340,158	133,333	149,333
Trieste	Pound	8639	559,738	81,027	90,750
Tripoli, in Syria,	Oke	18691	211,127	37,451	41,945

		Weight of a single lb. Rottolo, &c.		Number equal to 100lb. Avoirdupois.	Number equal to 112lb. Avoirdupois.
		Eng. Grains.	Fr. Grammes.		
Tripoli, in Africa,	Rottolo	7840	507,969	89,285	99,999
Tunis	Rotul	7773,5	503,660	90,049	100,855
Turin	Libbra	5692	368,796	122,979	137,736
Valencia	Heavy Pound	8226	532,978	85,096	95,307
	Light Pound	5484	355,350	127,644	142,961
Venice	Libbra, Peso Grosso	7363	477,063	95,069	106,772
	Libbra, Peso Sottile	4650	301,282	150,537	168,601
	Libbra, Nuova	15434	1000,000	45,354	50,796
Verona	Libbra, Peso Grosso	7676	497,343	91,193	102,136
	Libbra, Peso Sottile	5134	332,642	136,345	152,706
Vienna	Pound	8645	560,126	80,972	90,688
Ulm	Pound	7234	468,705	96,765	108,377
Wirtemberg	Pound	7220	467,792	96,953	108,586
Wismar	Pound	7625	494,039	91,803	102,819
Wurtzburg	Pound	7362	476,998	95,083	106,492
Zante	(See *Venice*)				
Zell	Pound	7511	486,652	93,196	104,378
Zurich	Heavy Pound	8138	527,277	86,016	96,337
	Light Pound	7233	468,640	96,778	108,391

CORN MEASURE.

TABLE III.

Containing a Comparison of the Corn Measures of different Places; namely, the Contents of a single Measure in English Cubic Inches, in Bushels, and in French Litres; also the Number of Measures of each Place, corresponding to Eight Bushels, or One Quarter, Winchester Measure.

		Contents of a single Measure of each sort.			Number of each equal to One English Quarter.
		Cubic Inches.	Bushels.	Fr. Litres.	
Aix la Chapelle	Fass	1461	0,679	23,939	11,782
Alexandria	Rebebe	9587	4,458	157,092	1,794
Algiers	Tarrie	1219	0,567	19,974	14,109
Alicant	Cahiz	15038	6,993	246,412	1,144
Amersfoort	Mudde	11457	5,327	187,744	1,502
Amsterdam	Mudde	6788	3,157	111,256	2,534
Ancona	Rubbio	17459	8,119	286,100	0,985
Antwerp	Hectolitre	6102	2,837	100,000	2,818
Arnheim	Malder	8333	3,875	136,541	2,064
Arragon	Cahiz	11021	5,125	180,486	1,561
Augsburg	Schaf	26812	12,467	439,341	0,641
Azores	Alqueire	731	0,340	11,978	23,530
Barcelona	Quartera	4175	1,941	68,419	4,121
Basil	Sack	7870	3,666	128,957	2,182
Bastia	Stajo	9153	4,256	150,000	1,879
Bayonne	Conque	2503	1,164	41,014	6,872
Bergamo	Soma	10020	4,659	164,187	1,720
Bergen	Toende	8488	3,947	139,084	2,026
Berlin	Scheffel	3180	1,479	52,107	5,409
Bern	Mutt	10260	4,771	168,120	1,676
Bilboa	Fanega	3668	1,706	60,104	4,689
Bologna	Corba	4503	2,094	73,786	3,820
Bolsano	Scheffel	6657	3,095	109,081	2,584
Boulogne	Setier	10535	4,898	172,626	1,633
Bourdeaux	Boisseau	4682	2,177	76,708	3,674
Breda	Viertel	5236	2,435	85,826	3,285
Bremen	Scheffel	4339	2,017	71,098	3,966
Breslau	Scheffel	4266	1,983	69,903	4,034
Brest	Tonneau	84200	39,153	1379,701	0,204
Bruges	Hoed	10164	4,726	166,547	1,692

		Contents of a single Measure of each Sort.			Number of each equal to One English Quarter.
		Cubic Inches.	Bushels.	Fr. Litres.	
Brunswick	Himten	1898	0,882	31,100	9,070
Cadiz	Fanega	3439	1,599	56,351	5,003
Calabria	Tomolo	3119	1,450	51,108	5,517
Canada	Minot	2339	1,088	38,327	7,353
Canary Isles	Fanega	3821	1,777	62,611	4,502
Candia	Carga	9288	4,322	152,193	1,851
Cassel	Viertel	8710	4,050	142,722	1,975
Cleves	Malter	10954	5,093	179,492	1,571
Coblentz	Malter	9742	4,530	159,632	1,766
Coburg	Simra	5353	2,489	87,727	3,214
Cologne	Malter	9891	4,599	162,073	1,739
Constantinople	Killow	2023	0,941	33,148	8,501
Copenhagen	Toende	8488	3,947	139,084	2,026
Corunna	Ferrado	1022	0,475	16,746	16,842
Cyprus	Medimno	4583	2,131	75,097	3,754
Dantzic	Scheffel	3337	1,552	54,680	5,155
Deventer	Mudde	7049	3,278	115,535	2,440
Dieppe	Mine	6243	2,903	102,297	2,755
Dordrecht	Great Sack	7638	3,552	125,163	2,252
	Little Sack	5728	2,664	93,872	3,003
Dresden	Scheffel	6455	3,002	105,788	2,664
Dunkirk	Sea Rasiere	9153	4,256	150,000	1,879
	Land Rasiere	8136	3,783	133,316	2,114
Elbing	Scheffel	2965	1,378	48,584	5,805
Embden	Tonne	11697	5,439	191,667	1,470
England	Bushel	2150,4	1,000	35,236	8,000
Erfurt	Scheffel	3668	1,706	60,120	4,689
Faro	Alqueire	982	0,456	16,091	17,543
Ferrara	Stajo	1909	0,887	31,281	90,191
Ferrol	Ferrado	1042	0,484	17,074	16,529
Fiume	Metze	3813	1,773	62,479	4,512
Florence	Stajo	1486	0,691	24,369	11,577
France	Setier	9519,9	4,427	156,000	1,807
	Hectolitre	6102	2,837	100,000	2,819
	Boisseau Usuel	762,7	0,354	12,500	22,598
Francfort	Malter	6590	3,064	107,984	2,611
Geneva	Coupe	4739	2,203	77,653	3,631
Genoa	Mina	7367	3,426	120,716	2,335
Goes	Sack	4888	2,273	80,106	3,519
Groningen	Mudde	5554	2,583	91,028	3,097
Haarlem	Sack	4823	2,243	79,050	3,566
Hague	Sack	6546	3,044	107,282	2,628
Hamburg	Scheffel	6426	2,988	105,296	2,677

		Contents of a single Measure of each Sort.			Number of each equal to One English Quarter.
		Cubic Inches.	Bushels.	Fr. Litres.	
Hanau	Malter	6868	3,194	112,539	2,501
Hanover	Himtem	1898	0,882	31,100	9,070
Heidelberg	Malter	6285	2,922	102,986	2,737
Hildesheim	Scheffel	3164	1,471	51,845	5,438
Holstein	Toende	8488	3,947	139,084	2,026
Konigsberg	Scheffel	3152	1,465	51,648	5,460
Leghorn	Sacco	4435	2,062	72,672	3,879
Leipsic	Scheffel	8481	3,943	138,969	2,029
Lewarden	Loop	5092	2,368	83,442	3,378
Leyden	Sack	4165	1,937	68,271	4,130
Libau	Lof	4190	1,948	68,657	4,106
Liege	Setier	1827	0,849	29,937	9,422
Lisbon	Alqueire	824,8	0,384	13,515	20,833
Lubec	Wheat Scheffel	2041	0,949	33,444	8,429
	Oat Scheffel	2395	1,113	39,244	7,187
Lucca	Stajo	1472	0,684	24,120	11,695
Luneburg	Scheffel	3799	1,767	62,250	4,527
Lyons	Asnée	11706	5,443	191,814	1,470
Magdeburg	Scheffel	3152	1,465	51,648	5,460
Majorca	Quartera	4301	1,999	70,476	4,002
Malaga	Fanega	3439	1,599	56,351	5,003
Malta	Salma	17678	8,221	289,672	0,973
Manheim	Malter	6285	2,922	102.986	2,737
Mantua	Stajo	2146	0,998	35,164	8,016
Maranham	Alqueire	2772	1,288	45,422	6,211
Marseilles	Charge	9763	4,540	160,000	1,762
Mecklenburg	Scheffel	2591	1,205	42,456	6,639
Mentz	Malter	5558	2,584	91,073	3,095
Middleburg	Sack	4417	2,054	72,387	3,895
Milan	Stajo	1115	0,518	18,270	15,444
Minorca	Quartera	4301	1,999	70,476	4,002
Modena	Stajo	4301	1,999	70,476	4,002
Montpellier	Setier	3232	1,503	52,959	5,322
Munich	Scheffel	22130	10,290	362,622	0,777
Nancy	Carte	2925	1,360	47,929	5,880
Nantes	Setier	8739	4,063	143,197	1,968
Naples	Tomolo	3122	1,451	51,157	5,513
Neda	Ferrado	1144	0,532	18,745	15,037
Negropont	Killow	1849	0,859	30,297	9,313
Netherlands	Mudde	6102	2 837	100,000	2,819
Nice	Charge	9763	4,540	160,000	1,762
Nimeguen	Scheffel	2546	1,184	41,721	6,756
Nuremberg	Malter	10200	4,744	167,137	1,686

		Contents of a single Measure of each Sort.			Number of each equal to One English Quarter.
		Cubic Inches.	Bushels.	Fr. Litres.	
Oldenburg	Tonne	9946	4,624	162,975	1,730
Osnaburg	Scheffel	1753	0,815	28,724	9,815
Oviedo	Fanega	4419	2,055	72,41	3,893
Parma	Stajo	3135	1,458	51,370	5,487
Patras	Staro	5012	2,330	82,126	3,433
Pernau	Tonne	7729	3,594	126,647	2,225
Persia	Artaba	4013	1,866	65,757	4,287
Poland	Korzec	3120,8	1,451	51,137	5,513
Prague	Strick	6516	3,030	106,771	2,640
Prussia	Scheffel	3353,6	1,559	54,952	5,130
Ragusa	Stajo	9072	4,218	148,653	1,896
Ratisbon	Maass	16016	7,448	262,445	1,074
Reval	Tonne	7219	3,356	118,290	2,383
Riga	Loop	4166	1,937	68,269	4,130
Rochelle	Boisseau	2007	0,933	32,886	8,574
Rome	Rubbio	17970	8,356	294,465	0,957
Rostock	Scheffel	2372	1,103	38,877	7,253
Rotterdam	Sack	6320	2,939	103,583	2,722
Rouen	Setier	10920	5,077	178,893	1,575
Russia	Chetwert	12800	5,952	209,740	1,344
St. Gall	Charge	4443	2,066	72,802	3,872
St. Maloes	Boisseau	2697	1,254	44,193	6,379
St. Valery	Setier	9356	4,350	153,307	1,839
Salonica	Killow	1184	5,505	19,401	1,453
Sardinia	Starello	2988	1,389	48,961	5,759
Scotland	Wheat Firlot	2197,3	1,022	36,005	7,827
	Barley Firlot	3205,5	1,490	52,525	5,369
Sicily	Salma Grossa	21014	9,771	34,433	0,818
	Salma Generale	16886	7,851	27,669	1,019
Smyrna	Killow	3132	1,456	51,321	5,494
Spain	Fanega	3439	1,599	56,351	5,003
Stettin	Scheffel	3180	1,479	52,107	5,409
Stralsund	Scheffel	2378	1,105	38,966	7,239
Strasburg	Land Setier	1154	0,536	18,909	14,925
	City Setier	1118	0,520	18,319	15,384
Sweden	Tunna of 32 Kappar	8940	4,157	146,490	1,924
	Kann	159,6	0,0742	2,615	107,816
Texel	Loop	3819	1,776	62,581	4,504
Trieste	Stajo	5040,6	2,344	82,611	3,413
	Metzen	3706	1,723	60,733	4,643
	Polonick	1853	0,861	30,367	9,291
Tunis	Caffice	32256	15,000	528,540	0,533
Turin	Sacco	7015	3,264	115,000	2,451

		Contents of a single Measure of each Sort.			Number of each equal to One English Quarter.
		Cubic Inches.	Bushels.	Fr. Litres.	
Valencia	Cahiz	12526	5,825	205,257	1,373
Venice	Stajo	4882	2,270	80,000	3,524
Verona	Minello	2221	1,033	36,393	7,745
Vianna	Alqueire	1031	0,479	16,894	16,701
Vienna	Metzen	3753	1,745	61,496	4,584
Ulm	Immi	14021	6,519	229,748	1,227
Utrecht	Sack	5498	2,557	90,116	3,128
Wirtemberg	Scheffel	10389	5,064	178,440	1,579
Wismar	Wheat Scheffel	2478	1,152	40,592	6,944
	Oat Scheffel	2616	1,216	42,852	6,578
Zante	Corfu Misura	1284,78	0,597	21,062	13,400
Zealand	Sack	4556	2,119	74,660	3,775
Zell	Himten	1898	0,882	31,099	9,070
Zurich	Mutt	5048	2,347	82,716	3,408
Zwoll	Mudde	6851	3,186	112,286	2,511

WINE MEASURE.

TABLE IV.

Containing a Comparison of the Liquid Measures of different Places; viz. 1st, the Contents of a single Measure in English Cubic Inches; 2d, in English Gallons; 3d, in French Litres; and, 4th, the Number of Gallons, &c. of each Place that are equal to 100 English Gallons.

		Contents of a single Measure of each sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	E. Gallons.	Fr. Litres.	
Abyssinia	Cuba	62	0,268	1,016	373,134
Alicant	Cantara	705	3,052	11,554	32,765
Amsterdam	Wine Stekan	1184	5,126	19,403	19,508
	Brandy Stekan	1145	4,956	18,759	20,177
	Beer Stekan	1199	5,193	19,656	19,256
Ancona	Soma	5241	22,698	85,917	4,405
Antwerp	Stoop	167	0,726	2,748	137,741
Arragon	Wine Cantaro	629	2,724	10,313	36,710
	Brandy Cantaro	852	3,690	13,970	27,100
Augsburg	Mass	90,3	0,391	1,479	255,754
Barcelona	Carga	7552	32,695	123,756	3,058
Bari	Oil Salma	10100	43,718	165,498	2,287
Basil	Ohm	3053	13,215	50,026	7,567
Bastia	Barile	8543	36,986	140,000	2,703
Bayonne	Velte	451	1,952	7,390	51,229
Bergamo	Brenta	4441	19,223	72,761	5,202
Berlin	Anker	2285,5	9,894	37,450	10,107
Berne	Mass	102	0,441	1,671	226,757
Bologna	Corba	4503	19,493	73,782	5,130
Bourdeaux	Barrique	14033	60,748	229,937	1,646
	Velte	438	1,896	7,177	52,742
Bremen	Stubgen	194,5	0,842	3,187	118,764
Breslau	Eimer	3389	14,670	55,532	6,816
Brunswick	Stubgen	224	0,969	3,669	103,199
Burgundy	Quartaut	6275	27,161	102,822	3,685
Canary Isles	Arroba	981	4,245	16,073	23,557
Candia	Oil Mistate	681	2,949	11,164	33,909
Cassel	Quartlin	499	2,160	8,175	46,296
Champagne	Quartaut	5496	23,789	90,057	4,203
Cognac	Brandy Velte	446	1,930	7,308	51,813

		Contents of a single Measure of each Sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	E. Gallons.	Fr. Litres.	
Cologne	Viertel	365	1,580	5,980	63,291
Constantinople	Almud	319	1,381	5,227	72,411
Copenhagen	Viertel	471,5	2,041	7,726	48,995
	Anker	2298	9,947	37,655	10,049
Corfu	Barile	4158	18,000	68,133	5,555
Cyprus	Cass	288,7	1,250	4,731	80,000
Dantzic	Ohm	9142	39,572	149,756	2,527
Dresden	Eimer	4128	17,870	67,639	5,596
Dunkirk	Lot	140	0,608	2,302	164,473
England	Wine Gallon	231	1,000	3,785	100,000
	Beer Gallon	282	1,220	4,621	81,967
Erfurt	Wine Eimer	4398	19,040	72,072	5,252
	Beer Eimer	4402	19,059	72,144	5,249
Faro	Almude	1131	4,896	18,532	20,425
Ferrara	Mastello	3379,5	14,630	55,378	6,835
Fiume	Orna	3253	14,082	53,303	7,101
Florence	Wine Barile	2781,7	12,042	45,584	8,304
	Oil Barile	2040	8,831	33,428	11,323
France	Setier	454	1,966	7,444	50,864
	Hectolitre	6102,8	26,419	100,000	3,785
Francfort	Viertel	450	1,948	7,373	51,334
Galicia	Moyo	9886	42,798	161,991	2,336
Gallipoli	Oil Salma	9459	40,948	154,992	2,442
Geneva	Setier	2760	11,948	45,224	8,369
Genoa	Wine Barile	4530	19,610	74,225	5,099
	Oil Barile	3946	17,082	64,657	5,854
Hamburg	Ahm	8836	38,250	144,786	2,614
Hanover	Ahm	9493	41,095	155,552	2,433
Heidelberg	Maass	140,4	0,607	2,300	164,744
Hungary, Upper	Eimer	4474	19,368	73,316	5,163
Hungary, Lower	Eimer	3472	15,030	56,892	6,653
	Tokay Anthal	3084	13,350	50,534	7,490
Ireland	Gallon	217,6	0,942	3,565	106,157
Konigsberg	Stof	87,5	0,378	1,433	264,550
Leghorn	Wine Barile	2781	12,042	45,584	8,304
	Oil Barile	2040	8,831	33,428	11,323
Leipsic	Eimer	4644	20,102	76,099	4,974
Libau	Oxhoft	14436	62,487	236,548	1,600
Lindau	Quart	140	0,606	2,294	165,016
Lisbon	Almude	1009,5	4,370	16,541	22,883
Lisle	Lot	126	0,545	2,064	183,486
Lubec	Viertel	441,9	1,913	7,241	52,273
Lucca	Oil Coppo	6093	26,373	99,839	3,791

		Contents of a single Measure of each Sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	E. Gallons.	Fr. Litres.	
Lyons	Asnée	5038	21,809	82,549	4,585
Majorca	Quartin	1655,8	7,168	27,131	13,951
Malaga	Arroba	967	4,186	15,850	23,889
Malta	Oil Caffiso	1270	5,497	20,810	18,191
Mantua	Oil Moggio	6804	29,454	111,489	3,395
Marseilles	Millerolle	3924,7	16,990	64,330	5,886
Mentz	Maass	114	0,493	1,868	202,839
Messina	Wine Salma	5331	23,079	87,360	4,333
	Oil Caffiso	714	3,090	11,699	32,362
Milan	Brenta	4357,5	18,865	71,405	5,301
Minorca	Gerra	736	3,187	12,063	31,377
Montpellier	Wine Barrique	1550	6,710	25,398	14,903
	Oil Barrique	2028	8,778	33,231	11,392
Munich	Wine Eimer	2252	9,750	37,020	10,256
Nantes	Wine Barrique	14645	63,405	240,000	1,577
	Brandy Velte	343	1,484	5,617	67,385
Naples	Wine Barile	2544	11,013	41,685	9,080
	Oil Salma	9884	42,783	161,959	2,337
Netherlands	Vat	6102,8	26,419	100,000	3,785
Nice	Rubbio	479,5	2,076	7,857	48,169
Nuremberg	Eimer Visiermass	4149	17,959	67,984	5,567
	Eimer Schenkmass	3872	16,761	63,439	5,966
Oldenburg	Oxhoft	15230	65,930	249,558	1,516
Oporto	Almude	1555	6,731	25,480	14,856
Osnaburg	Viertel	298	1,290	4,883	77,519
Oviedo	Cantara	1177	5,098	19,286	19,615
Pernau	Anker	2364	10,233	38,736	9,772
Poland	Garniec	97	0,419	1,590	238,663
Prague	Eimer	3916	16,950	64,167	5,899
Prussia	Eimer	4192	18,145	68,690	5,511
Ragusa	Barrel	4704	20,363	77,075	4,911
Ratisbon	Great Eimer	6934	30,014	113,620	3,331
	Berg Eimer	5359	23,196	87,812	4,311
Reval	Anker	2580	11,172	42,276	8,951
Riga	Anker	2386	10,333	39,097	9,677
Rio de Janeiro	Medida	161,7	0,700	2,651	142,857
Rochelle	Wine Barrique	10636	46,039	174,279	2,172
	Brandy Velte	446	1,930	7,308	51,813
Rome	Wine Barrile	3560,4	15,413	58,341	6,488
	Oil Barrile	3507	15,185	57,480	6,585
Rostock	Anker	2209	9,562	36,199	10,458
Rotterdam	Ahm	9238,4	39,993	151,380	2,500
Rouen	Barrique	11940	51,688	195,648	1,934

		Contents of a single Measure of each Sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	E. Gallons.	Fr. Litres.	
Russia	Vedro	750	3,246	12,289	30,807
Schaffhausen	Mass	80	0,346	1,311	289,017
Scotland	Pint	103,4	0,447	1,694	223,713
Spain	Wine Arroba	981	4,245	16,073	23,557
	Oil Arroba	771	3,337	12,633	29,966
Stralsund	Stubgen	237	1,027	3,883	97,371
Strasburg	Ohm	2813	12,176	46,093	8,212
Sweden	Kann	159,6	0,691	2,615	144,717
Trieste	Wine Orna	3452	14,942	56,564	6,692
Tunis	Millerolle	3924,7	16,990	64,330	5,886
	Oil Mettar	1183,8	5,125	19,397	19,512
Turin	Rubbio	573	2,480	9,389	40,322
Valencia	Arroba	719	3,112	11,786	32,133
Venice	Secchio	659	2,853	10,800	35,051
	Oil Miro	930	4,028	15,238	24,826
Verona	Brenta	4417	19,119	72,677	5,230
	Oil Bassa	276	1,194	4,522	83,752
Vienna	Eimer	3452	14,942	56,564	6,692
Wismar	Viertel	441,9	1,913	7,241	52,273
Zante	Barile	4071	17,625	66,707	5,673
Zell	Stubgen	237	1,025	3,883	97,561
Zurich	Land Maass	111,3	0,481	1,823	207,900
	City Maass	100,2	0,433	1,642	230,946
	Oil Maass	84	0,363	1,376	275,482

CLOTH MEASURE.

TABLE V.

Containing a Comparison of the Cloth Measures of different Countries. It shews the Length of each Measure in English Inches and in French Decimetres; also the Number of Ells, Aunes, &c. of each Place that correspond to 100 *English Yards.*

		Length of a single Measure of each Sort.		Number of each equal to 100 English Yards.
		English Inches.	Fr. Decimetres.	
Abyssinia	Pic	27,00	6,857	133,333
Aix la Chapelle	Ell	26,33	6,687	136,726
Aleppo	Pic	26,66	6,771	135,033
Alexandria	Pic	26,80	6,806	134,328
Algiers, Turkish	Pic	24,53	6,230	146,759
Moorish	Pic	18,40	4,673	195,652
Alicant	Vara	29,95	7,607	120,200
Amsterdam	Ell	27,07	6,878	132,988
Ancona	Braccio	25,33	6,433	142,124
Antwerp	Silk Ell	27,32	6,939	131,771
	Woollen Ell	26,96	6,846	133,531
Arragon	Vara	30,22	7,675	119,126
Augsburg	Long Ell	24,00	6,095	150,000
	Short Ell	23,32	5,923	154,373
Barcelona	Canna	21,06	5,350	170,940
Basil	Aune	46,38	11,780	77,619
	Brasse	21,41	5,438	168,145
Batavia	Ell	27,00	6,857	133,333
Bayonne	Aune	34,80	8,838	103,448
Bengal	Cubit	18,00	4,571	200,000
Bergamo	Braccio	25,80	6,553	139,534
Bergen	Ell	24,71	6,276	145,690
Berlin	Ell	26,25	6,668	137,142
Berne	Ell	21,40	5,433	168,224
Betelfagui	Guz	25,00	6,349	144,000
Bologna	Woollen Braccio	25,00	6,349	144,000
	Silk Braccio	23,46	5,955	153,452
Bolsano	Ell	31,11	7,902	115,718
	Braccio	21,64	5,497	166,358
Bombay	Covid	18,00	4,571	200,000

		Length of a single Measure of each Sort.		Number of each equal to 100 English Yards.
		English Inches.	Fr. Decimetres.	
Bourdeaux	Aune	46,93	11,959	76,709
Brabant	Ell	27,58	7,006	130,529
Brazil	Vara	43,50	11,048	82,758
Bremen	Ell	22,76	5,781	158,172
Brescia	Ell	18,40	4,673	195,652
Breslau	Ell	22,67	5,759	158,800
Brunswick	Ell	22,46	5,704	160,284
Cairo	Pic	26,80	6,806	134,329
Calemberg	Ell	22,90	5,816	157,205
Calicut	Guz	28,40	7,210	126,760
Candia	Pic	25,11	6,377	143,369
Cassel	Ell	22,11	5,617	162,822
China	Covid	14,62	3,713	246,238
Coblentz	Ell	22,00	5,585	163,636
Coburg	Ell	23,07	5,857	156,046
Cologne	Long Ell	27,34	6,941	131,675
	Short Ell	22,62	5,745	159,151
Constantinople	Long Pic.	27,90	7,083	129,032
	Short Pic.	27,06	6,870	133,037
Copenhagen	Ell	24,71	6,276	145,690
Cremona	Braccio	24,24	6,157	148,514
Cyprus	Pic	26,45	6,715	136,105
Damascus	Pic	22,93	5,822	156,999
Dantzic	Ell	22,60	5,738	159,292
Dresden	Ell	22,28	5,658	161,579
Dunkirk	Aune	26,62	6,762	135,236
Elbing	Ell	22,30	5,664	161,434
Embden	Ell	26,40	6,704	136,363
England	Yard	36,00	9,144	100,000
	Ell	45,00	11,429	80,000
Erfurt	Long Ell	23,38	5,940	153,977
	Short Ell	15,90	4,036	226,415
Ferrara	Woollen Braccio	26,33	6,690	136,726
	Silk Braccio	24,75	6,284	145,454
Florence	Braccio	22,98	5,836	156,657
France	Aune	46,85	11,886	76,841
	Aune Usuelle	47,24	12,000	76,206
	Metre	39,37	10,000	91,440
Francfort	Ell	21,24	5,392	169,491
Gamron	Guz	38,70	9,826	93,023
Geneva	Aune	45,00	11,429	80,000
Genoa	Braccio	22,69	5,764	158,660
	Canna Grossa	116,70	29,630	30,848

		Length of a single Measure of each Sort.		Number of each equal to 100 English Yards.
		English Inches.	Fr. Decimetres.	
Genoa	Canna Piccola	87,52	22,229	41,133
	Custom-House Canna	97,25	24,691	37,018
Guinea	Jacktan	144,00	36,574	25,000
Hague	Ell	27,33	6,942	131,723
Hamburg	Ell	22,58	5,733	159,433
Hanover	Ell	22,90	5,816	157,205
Hildesheim	Ell	22,10	5,613	162,895
Inspruck	Ell	31,00	7,873	116,129
Japan	Inc	74,90	19,017	48,064
Kiel	Ell	22,64	5,752	159,010
Konigsberg	Ell	22,62	5,745	159,151
Leghorn	Braccio	23,98	5,836	156,657
Leipsic	Ell	22,22	5,644	162,016
Leyden	Ell	26,89	6,830	133,878
Libau	Ell	24,04	6,104	149,750
Liege	Ell	21,71	5,515	165,822
Lisbon	Vara	43,20	10,968	83,333
	Covado	26,70	6,781	134,831
	Palmo Avantejado	8,90	2,260	404,494
	Palmo de Craviera	8,64	2,193	416,666
Lisle	Aune	27,70	7,033	129,963
Lubec	Ell	22,69	5,761	158,660
Lucca	Woollen Braccio	23,80	6,042	151,260
	Silk Braccio	22,80	5,789	157,894
Luneburg	Ell	22,90	5,816	157,205
Lyons	Aune	46,20	11,741	77,922
Madras	Covid	18,00	4,571	200,000
Maestricht	Ell	26,91	6,835	133,779
Majorca	Canna	67,50	17,138	53,333
Malacca	Covid	18,13	4,603	198,565
Malta	Canna	81,90	20,794	43,956
Manheim	Ell	21,99	5,558	163,710
Mantua	Braccio	25,00	6,349	144,000
Marseilles	Aune	46,77	11,880	76,972
Memel	Ell	22,62	5,745	159,151
Mentz	Ell	21,60	5,486	166,666
Milan	Braccio	23,42	5,949	153,714
	Metro	39,37	10,000	91,440
Mocha	Guz	25,00	6,349	144,000
	Covit	19,00	4,824	189,473
Modena	Braccio	24,31	6,175	148,087
Montpellier	Canne	78,24	19,874	46,012
Morocco	Cubit	21,00	5,332	171,428

		Length of a single Measure of each Sort.		Number of each equal to 100 English Yards.
		English Inches.	Fr. Decimetres.	
Munich	Ell	32,90	8,353	109,422
Munster	Ell	31,84	8,084	113,065
Namur	Ell	26,11	6,632	137,878
Nancy	Aune	25,18	6,397	142,970
Nantes	Aune	55,80	14,166	64,516
Naples	Canna	83,00	21,073	43,373
Narva	Ell	23,55	5,982	152,866
Netherlands	Ell	39,37	10,000	91,440
Neufchatel	Aune	43,80	11,125	82,191
Nice	Ell	46,77	11,875	76,972
Nimeguen	Ell	26,11	6,632	137,878
Nuremberg	Ell	25,96	6,596	138,675
Oldenburg	Ell	22,76	5,781	158,172
Oran	Pic	27,00	6,857	133,333
Osnaburg	Long Ell	23,70	6,017	151,898
	Short Ell	22,96	5,833	156,794
Oudenarde	Ell	26,28	6,677	136,986
Ostend	Ell	27,53	6,993	130,766
Oviedo	Vara	34,02	8,637	105,820
Padua	Woollen Braccio	26,80	6,812	134,328
	Silk Braccio	25,30	6,429	142,292
Parma	Cloth Braccio	25,10	6,377	143,426
	Silk Braccio	23,10	5,865	155,844
	Surveyors' Braccio	21,34	5,420	168,697
Patras	Linen Pic	27,00	6,857	133,333
	Silk Pic	25,00	6,349	144,000
Pernau	Ell	21,60	5,486	166,666
Persia	Royal Guerze	37,21	9,456	96,748
	Arish	38,27	9,716	94,068
Poland	Ell	24,30	6,169	148,148
Prague	Ell	23,32	5,923	154,373
Prince of Wales Island	Astah	18,00	4,571	200,000
Prussia	Ell	26,25	6,669	137,142
Ragusa	Ell	20,20	5,132	178,217
Ratisbon	Ell	31,90	8,110	112,852
Ravenna	Braccio	26,46	6,722	136,054
Reggio	Braccio	20,85	5,295	172,661
Reval	Ell	21,80	5,355	170,616
Rhodes	Pic	29,76	7,559	120,967
Riga	Ell	21,58	5,479	166,821
Rio de Janeiro	Vara	43,50	11,048	82,758
Rochelle	Aune	46,50	11,820	77,419

		Length of a single Measure of each Sort.		Number of each equal to 100 English Yards.
		English Inches.	Fr. Decimetres.	
Rome	Canna Mercantile	78,34	19,900	45,953
	Builders' Canna	87,96	22,342	40,927
Rostock	Ell	22,76	5,783	158,172
Rotterdam	Ell	27,20	6,902	132,352
Rouen	Linen Aune	55,00	13,967	65,454
	Silk and Woollen Aune	45,80	11,639	78,602
Russia	Arsheen	28,00	7,109	128,571
Saltzburg	Linen Ell	39,59	10,056	90,932
	Silk Ell	31,56	8,017	114,068
St. Gall	Linen Ell	31,56	8,017	114,068
	Cloth Ell	24,20	6,158	148,760
St. Maloes	Aune	53,00	13,471	67,924
Sardinia	Ell	21,62	5,488	166,512
Schaffhausen	Ell	23,74	6,030	151,642
Scios	Long Pic	27,00	6,857	133,333
	Short Pic	25,98	6,600	138,568
Scotland	Ell	37,20	9,445	96,774
Siam	Voua	75,75	19,239	47,524
Sicily	Canna	76,25	19,360	47,213
Sienna	Cloth Braccio	14,86	3,776	242,261
	Linen Braccio	23,63	6,002	152,348
Smyrna	Pic	27,00	6,857	133,333
Spain	Vara	33,38	8,475	107,849
Stettin	Ell	25,62	6,508	140,515
Stralsund	Ell	22,90	5,820	157,205
Strasburg	Aune	21,20	5,382	169,811
Stutgard	Ell	24,08	6,116	149,501
Surat	Guz	28,20	7,162	127,659
	Covid	18,50	4,698	194,594
Sweden	Ell	23,36	5,934	154,109
Thorn	Ell	22,42	5,695	160,570
Toulouse	Canne	71,67	18,206	50,230
Tournay	Ell	24,40	6,195	147,540
Trent	Cloth Ell	26,64	6,767	135,135
	Silk Ell	24,09	6,119	149,439
Treves	Ell	21,97	5,581	163,859
Trieste	Woollen Ell	26,60	6,758	135,338
	Silk Ell	25,22	6,406	142,743
Tripoli, (Barbary)	Pic	21,80	5,536	165,137
Tripoli, (Syria)	Pic	26,99	6,857	133,382
Tunis	Woollen Pic	26,50	6,730	135,849
	Silk Pic	24,83	6,298	144,985
	Linen Pic	18,62	4,727	193,340

		Length of a single Measure of each Sort.		Number of each equal to 100 English Yards.
		English Inches.	Fr. Decimetres.	
Turin	Raso	23,30	5,915	154,506
Valencia	Vara	36,62	9,303	98,307
Valenciennes	Aune	25,93	6,587	138,831
Venice	Woollen Braccio	26,61	6,761	135,287
	Silk Braccio	24,81	6,304	145,102
Verona	Woollen Braccio	25,57	6,493	140,789
	Silk Braccio	25,22	6,406	142,743
Vicenza	Braccio	26,96	6,848	133,531
Vienna	Silk Ell	30,66	7,790	117,416
	Ell of Upper Austria	31,50	8,000	114,285
Ulm	Ell	22,38	5,682	160,857
Wismar	Ell	22,90	5,816	157,205
Wurtzburg	Ell	22,80	5,789	157,894
Ypres	Ell	27,53	6,993	130,766
Zante	Cloth Braccio	27,18	6,903	132,450
	Silk Braccio	25,37	6,443	141,899
Zell	Ell	22,90	5,816	157,205
Zittau	Ell	22,43	5,698	160,499
Zurich	Ell	23,62	6,000	152,413

LONG MEASURE.

TABLE VI.

Containing a Comparison of the Foot, and other Measures of Length in different Countries. It shews the Length of a single Measure of each Denomination in English Inches and in French Decimetres; also the Number of Feet, &c. of each Place that correspond to 100 *English Feet.*

		Length of a single Measure of each Sort.		Number of each equal to 100 English Feet.
		Eng. Inches.	Fr. Decimetres.	
Aix la Chapelle	Foot	11,41	2,896	105,171
Amsterdam	Foot	11,14	2,831	107,719
	Rhineland Foot	12,35	3,138	97,166
Anspach	Foot	11,72	2,978	102,389
Antwerp	Foot	11,24	2,855	106,761
Augsburg	Foot	11,65	2,959	103,004
Basil	Foot	11,75	2,983	102,127
Bergamo	Foot	17,17	4,360	69,889
Berlin	Foot	12,19	3,097	98,441
Berne	Foot	11,54	2,932	103,986
Bologna	Foot	14,99	3,805	80,053
Bourdeaux	Foot	14,04	3,567	85,470
Bremen	Foot	11,38	2,891	105,448
Breslau	Foot	11,19	2,842	107,238
Brunswick	Foot	11,23	2,851	106,856
Cagliari	Palmo	7,97	2,025	150,564
Calemberg	Foot	11,53	2,926	104,076
Carrara	Palmo	9,59	2,436	125,130
China	Mathematical Foot	13,12	3,331	91,463
	Builders' Foot	12,71	3,228	94,414
	Tradesmen's Foot	13,33	3,383	90,022
	Land-Surveyors' Foot	12,58	3,196	95,389
Cleves	Foot	11,63	2,955	103,181
Cologne	Foot	10,83	2,750	110,803
Copenhagen	Rhineland Foot	12,35	3,138	97,166
Cracow	Foot	14,03	3,564	85,531
Cremona	Foot	15,62	3,970	76,824
Dantzic	Foot	11,30	2,869	106,194
Dordrecht	Foot	14,17	3,600	84,686
Dresden	Foot	11,14	2,831	107,719

		Length of a single Measure of each Sort.		Number of each equal to 100 English Feet.
		Eng. Inches.	Fr. Decimetres.	
Embden	Foot	11,66	2,961	102,915
England	Foot	12,00	3,048	100,000
Erfurt	Foot	11,11	2,822	108,010
Ferrara	Foot	15,80	4,011	75,949
France	Pied de Roi	12,78	3,248	93,896
	Metre	39,37	10,000	30,480
Francfort	Foot	11,28	2,865	106,382
Geneva	Foot	19,21	4,879	62,467
Genoa	Palmo	9,72	2,470	123,450
Gottingen	Foot	11,45	2,908	104,803
Gotha	Foot	11,32	2,874	106,007
Groningen	Foot	11,49	2,917	104,438
Haerlem	Foot	11,25	2,858	106,666
Hamburg	Foot	11,28	2,865	106,382
Hanover	Foot	11,45	2,908	104,803
Heidelberg	Foot	10,96	2,785	109,489
Hildesheim	Foot	11,05	2,806	108,597
Inspruck	Foot	12,50	3,176	96,000
Konigsberg	Foot	12,11	3,076	99,091
Leipsic	Foot	11,11	2,822	108,010
	Builders' Foot	11,13	2,826	107,816
Leyden	Foot	12,34	3,135	97,244
Liege	Foot	11,32	2,874	106,007
Lindau	Common Foot	11,40	2,894	105,263
	Long Foot	12,40	3,148	96,774
Lisbon	Foot	12,94	3,285	92,735
Lorraine	Foot	11,30	2,869	106,194
Lubec	Foot	11,34	2,880	105,820
Luneburg	Foot	11,45	2,908	104,803
Lyons	Foot	13,48	3,425	89,020
Maestricht	Foot	11,05	2,806	108,597
Magdeburg	Foot	11,16	2,836	107,526
Malta	Foot	11,16	2,836	107,526
Manheim	Foot	11,41	2,896	105,170
Marseilles	Canne	79,23	20,126	15,145
Mecklenburg	Foot	11,45	2,908	104,803
Middleburg	Foot	11,81	3,000	101,608
Milan	Builders' Foot	15,62	3,965	76,824
Moscow	Foot	13,17	3,343	91,116
Munich	Foot	11,37	2,891	105,540
Naples	Palmo	10,38	2,637	115,606
Neufchatel	Foot	11,81	3,000	101,608
Nice	Pan	10,29	2,615	116,618

		Length of a single Measure of each Sort.		Number of each equal to 100 English Feet.
		Eng. Inches.	Fr. Decimetres.	
Nuremberg	Foot	11,96	3,036	100,334
Oldenburg	Foot	11,65	2,959	103,004
Osnaburg	Foot	11,00	2,792	109,090
Padua	Foot	13,93	3,536	86,145
Pavia	Foot	18,30	4,646	65,573
Pisa	Palmo	11,74	2,984	102,214
Prague	Foot	11,82	3.002	101,522
Prussia	Rhineland Foot	12,35	3,138	97,166
Ratisbon	Foot	11,42	2,899	105,078
Reval	Foot	10,53	2,677	113,960
Rhineland	Foot	12,35	3,138	97,166
Riga	Foot	10,79	2,739	111,214
Rome	Foot	11,72	2,978	102,389
Rostock	Foot	11,38	2,891	105,448
Russia	Foot	13,75	3,491	87,272
Sardinia	Palmo	9,78	2,483	122,699
Sicily	Palmo	9,53	2,420	125,918
Sienna	Foot	14,86	3,774	80,753
Spain	Foot	11,12	2,826	107,913
Stettin	Foot	11,12	2,826	107,913
	Rhineland Foot	12,35	3,138	97,166
Stralsund	Foot	11,45	2,908	104,803
Strasburg	Foot	11,39	2,894	105,855
	Land Foot	11,62	2,952	103,270
Sweden	Foot	11,68	2,968	102,739
Turin	Foot	12,72	3,230	94,339
Valencia	Palmo	9,15	2,325	131,147
Venice	Foot	13,68	3,473	87,719
Verona	Foot	13,40	6,403	89,552
Vicenza	Foot	13,63	3,461	88,041
Vienna	Foot	12,45	3,161	96,385
Ulm	Foot	11,39	2,892	105,355
Wirtemberg	Foot	11,26	2,860	106,571
Wismar	Foot	11,45	2,908	104,803
Zante	*(See Venice)*			
Zell	Foot	11,45	2,908	104,803
Zurich	Foot	11,81	3,000	101,608

SQUARE MEASURE.

TABLE VII.

Shewing the Contents of the Square Foot of different Countries in English Square Inches and in French Square Decimetres.

	Eng. Square Inches.	Fr. Sq. Decimetres.
A Square Foot of Amsterdam contains	124,255	8,0160
Antwerp	126,337	8,1503
Augsburg	135,722	8,7558
Basil	138,062	8,9067
Berlin	148,693	9,5926
Berne	133,287	8,5987
Bologna	224,700	14,4960
Bremen	129,504	8,3546
Breslau	125,216	8,0780
Cologne	117,288	7,5666
Dantzic	127,690	8,2376
Dresden	124,099	8,0059
England	144,000	9,2898
France ..... Pied de Roi	163,558	10,5516
Square Metre	1550,075	100,0000
Geneva	369,024	23,8068
Hamburg	127,441	8,2216
Hanover	131,194	8,4637
Konigsberg	146,652	9,4609
Leipsic	123,432	7,9629
Liege	128,142	8,2668
Lisbon	167,547	10,8089
Lubec	128,731	8,3048
Milan	243,984	15,7401
Munich	129,390	8,3473
Nuremberg	143,041	9,2279
Osnaburg	121,000	7,8060
Ratisbon	130,416	8,4135
Reval	110,881	7,1532
Rhineland	152,670	9,8492
Riga	116,424	7,5108
Rome	137,358	8,8614
Spain	123,832	7,9887
Sweden	136,515	8,8069
Turin	161,798	10,4380
Venice	187,142	12,0731
Vienna	155,002	9,9996
Zurich	139,476	8,9980

CUBIC MEASURE.

TABLE VIII.

Shewing the Contents of the Cubic Foot of different Countries in English Cubic Inches and in French Litres, or Cubic Decimetres.

	Eng. Cubic Inches.	Fr. Litres.
A Cubic Foot of Amsterdam contains	1385,070	22,695
Antwerp	1420,027	23,268
Augsburg	1581,161	25,908
Basil	1622,228	26,581
Berlin	1813,162	29,710
Berne	1538,798	25,214
Bologna	3368,253	55,191
Bremen	1473,755	24,141
Breslau	1401,167	22,959
Cologne	1270,229	20,813
Dantzic	1442,897	23,643
Dresden	1382,463	22,653
England	1728,000	28,312
France	2091,743	34,275
Cubic Decimetre	61,028	1,000
Geneva	7088,951	116,158
Hamburg	1438,684	23,574
Hanover	1502,696	24,623
Konigsberg	1775,955	29,100
Leipsic	1371,329	22,470
Liege	1450,577	23,769
Lisbon	2168,728	35,536
Lubec	1460,582	23,933
Milan	3811,030	62,447
Munich	1471,811	24,117
Nuremberg	1710,770	28,032
Osnaburg	1331,000	21,809
Ratisbon	1489,350	24,404
Reval	1167,577	19,131
Rhineland	1886,390	30,911
Riga	1256,215	20,584
Rome	1609,835	26,378
Spain	1378,002	22,579
Sweden	1595,041	26,136
Turin	2058,070	33,723
Venice	2560,102	41,949
Vienna	1929,774	31,621
Zurich	1647,211	26,991

LAND MEASURE.

TABLE IX.

Containing a Comparison of the Land Measures of different Countries; namely, the Area of each Measure in English Square Yards and in French Ares; also the Number of Acres, &c. of each Place that correspond to 10 *English Acres.*

		Contents of a single Measure of each Sort.		Number of each equal to 10 English Acres
		Eng. Sq. Yards.	French Ares.	
Amsterdam	Morgen	9722	81,286	4,978
Basil	Juchart	3816	31,905	12,683
Berlin	Great Morgen	6786	56.736	7,132
	Little Morgen	3054	25,534	15,848
Berne	Wood Juchart	4632	38,727	10,449
Canary Isles	Fanegada	2422	20,236	19,983
Dantzic	Morgen	6650	55,642	7,278
England	Acre	4840	40,466	10,000
France	Hectare	11960	100,000	4,046
Geneva	Arpent	6179	51,661	7,833
Hamburg	Scheffel of Corn Land	5022	41,984	9,637
	Morgen	11545	96,525	4,192
Hanover	Morgen	3100	25,918	15,613
Ionian Islands	Moggio	11616	97,119	4,166
Ireland	Acre	7840	65,549	6,173
Naples	Moggia	3998	33,426	12,106
Netherlands	Vierkantebunder	119,6	1,000	406,722
Nuremberg	Corn Land Morgen	5654	47,272	8,560
	Meadow Morgen	2544	21,270	19,025
Portugal	Geira	6970	58,275	6,944
Prussia	Morgen	3053	25,526	15,853
Rhineland	Morgen	10185	85,158	4,752
Rome	Pezza	3158	26,406	15,196
Russia	Dessetina	13066,6	109,248	3,704
Saxony	Acre	6590	55,098	7,344
Scotland	Acre	6150	51,419	7,869
Spain	Fanegada	5500	45,984	8,800
	Arranzada	4623	38,652	10,469
Sweden	Tunneland	5900	49,329	8,203
Switzerland	Faux	7855	65,674	6,161
Tuscany	Quadrato	4074	34,062	11,880
Vienna	Joch	6889	57,598	7,025
Zurich	Common Acre	3875,6	32,404	12,488
	Wood Acre	4306	36,004	11,240
	Meadow Acre	3445	28,804	14,049

ROAD MEASURE.

TABLE X.

Being a Comparison of the Miles, Leagues, and other Itinerary Measures of different Countries; namely, the Length of each Mile, &c. in English Yards and in French Kilometres; also, the Number of each answering to 100 English Miles.

		Length of a single Measure of each Sort.		Number of each equal to 100 English Miles.
		English Yards.	Fr. Kilometres.	
Arabia	Mile	2148	1,964	81,936
Brabant	League	6076	5,556	28,966
China	Li	632	0,577	278,481
Dantzic	Mile	8475	7,749	20,767
Denmark	Mile	8244	7,538	21,348
England	Mile	1760	1,609	100,000
	Mile, Geographical	2025	1,851	86,913
Flanders	League	6864	6,276	25,641
France	Kilometre	1093	1,000	161,024
	League of 2000 Toises	4263	3,898	41,285
	League of 25 to the Degree	4860	4,444	36,214
	League, Marine	6076	5,555	28,966
Germany	Mile, Geographical	8101	7,407	21,725
	Mile, Long	10126	9,258	17,381
	Mile, Short	6859	6,271	25,659
Hamburg	Mile	8244	7,538	21,348
Hanover	Mile	11559	10,569	15,226
Holland	Mile	8101	7,407	21,725
Hungary	Mile	9113	8,332	19,313
Ireland	Mile	2240	2,048	78,571
Netherlands	Mile, Metrical	1093	1,000	161,024
Persia	Parasang	6086	5,565	28,918
Poland	Mile, Long	8101	7,407	21,725
	Mile, Short	6076	5,555	28,966
Portugal	League	6760	6,181	26,035
Prussia	Mile	8237	7,532	21,367
Rome	Mile	1628	1,489	108,108
	Mile, Metrical	1093	1,000	161,024
	Mile, Geographical	2025	1,851	86,913
Russia	Werst	1167	1,066	150,814
Scotland	Mile	1984	1,814	88,709
Spain	League, Common	7416	6,781	23,732
	League, Judicial	4635	4,238	37,972
Sweden	Mile	11700	10,698	15,042
Switzerland	Mile	9153	8,369	19,228
Tuscany	Mile	1808	1,653	97,345
Turkey	Berri	1826	1,669	96,385

COMPARISON OF FRENCH AND ENGLISH METROLOGY.

TABLE XI.

Containing the New Weights and Measures of France, with their Proportion to those of England, both according to the Decimal System, and the Systeme Usuel.

DECIMAL SYSTEM.

LONG MEASURES.

French.	English.
Millimetre	0,03937 Inches.
Centimetre	0,39371 Inches.
Decimetre	3,93710 Inches.
Metre	39,37100 Inches.
Decametre	32,80916 Feet.
Hectometre	328,09167 Feet.
Kilometre	1093,6389 Yards.
Myriametre	10936,38900 Yards, or 6 Miles 1 Furlong 28 Poles.

SUPERFICIAL MEASURES.

Centiare	1,1960 Square Yard
Are (a Square Decametre)	119,6046 Square Yards
Decare	1196,0460 Square Yards
Hectare	11960,4604 Square Yards or 2 Acres, 1 Rood, 35 Perches.

MEASURES OF CAPACITY.

Millitre	0,06103 Cubic Inches.
Centilitre	0,61028 Cubic Inches.
Decilitre	6,10280 Cubic Inches.
Litre (a Cubic Decimetre)	61,02802 Cubic Inches, or 2,1135 Wine Pints.
Decalitre	610,28028 Cubic Inches, or 2,642 Wine Gallons.

French.	English.
Hectolitre	3,5317 Cubic Feet, or 2,838 Winchester Bushels.
Kilolitre	35,3171 Cubic Feet, or 1 Tun & 12 Wine Gal.
Myrialitre	353,17146 Cubic Feet.

SOLID MEASURES.

Decistere	3,5317 Cubic Feet.
Stere (a Cubic Metre)	35,3171 Cubic Feet.
Decastere	353,1714 Cubic Feet.

WEIGHTS.

Milligramme	0,0153 Grains.
Centigramme	0,1543 Grains.
Decigramme	1,5434 Grains.
Gramme	15,4340 Grains.
Decagramme	154,3402 Grains, or 5,64 Drams Avoirdupois.
Hectogramme	3,2154 oz. Troy, or 3,527 oz. Avoirdupois.
Kilogramme	2 lb. 8 oz. 3 dwt. 2gr. Troy, or 2 lb. 3 oz. 4,428 Drams Avoirdupois.
Myriagramme	26,795 Pounds Troy, or 22,0485 Pounds Avoirdupois.
Quintal	1 cwt. 3 qrs. 25 lb. nearly.
Millier, or Bar	9 tons 16 cwt. 3 qrs. 12 lb.

SYSTEME USUEL.

LONG MEASURES.

Usuel.		Metrical.		English.
Ligne	=	2,31 Millimetres	=	0,091 Inches.
Pouce	=	2,77 Centimetres	=	1,090 Inches.
Pied	=	3,33 Decimetres	=	13,110 Inches.
Aune	=	12 Decimetres	=	3 Feet 11,24 Inches.
Toise	=	2 Metres	=	6 Feet 6,74 Inches.

MEASURE OF CAPACITY.

Boisseau	=	12,5 Litres	=	2,837 Gallons.

WEIGHTS.

Grain	=	5,425 Centigrammes	=	0,837 Grains.
Gros	=	3,906 Grammes	=	60,285 Grains.
Once	=	31,25 Grammes	=	482,312 Grains, or 1 oz. 1,628 Dram Avoirdupois.
Livre	=	500 Grammes	=	1 lb. 4 oz. 1 dwt. 13 gr. Troy, or 1 lb. 1 oz. $10\frac{1}{5}$ dr. Avoirdupois.

For the Proportions between the subordinate Weights and Measures of England and the Metrology of France, see Vol. i. p. 225.

For the New Astronomical and Geographical Measures of France, see Vol. i. p. 138.

For the Ancient Weights and Measures of France, see Vol. i. p. 133.

EXAMPLES OF THE USE OF THE FOREGOING TABLES.

The proportion between the Weights and Measures of any two Places in the foregoing Tables may be found by the Rule of Three, or in the following manner by the Chain Rule:

Example I.—How many Marks, gold and silver weight of Berlin, are equal to 1120 Marks of Amsterdam or Holland? *See Table I.*

1120 Marks of Amsterdam.
1 Mark of Amsterdam = 3798 English Grains.
3608 English Grains = 1 Mark of Berlin.
Result, 1178,9 Marks of Berlin.

Or, as 3608 : 1 :: 3798 × 1120 : 1178,9

Example II.—How many Pounds, commercial weight of Amsterdam, are equal to 276 Pounds of Leghorn? *See Table II.*

276 Pounds of Leghorn.
1 Pound of Leghorn = 5240 English Grains.
7625 English Grains = 1 Pound of Amsterdam.
Result, 189,67 Pounds of Amsterdam.

Example III.—How many Spanish Fanegas are equal to 523 Scheffels of Dantzic? *See Table III.*

523 Scheffels of Dantzic.
1 Scheffel of Dantzic = 3337 English Cubic Inches.
3439 English Cubic Inches = 1 Fanega of Spain.
Result, 507,48 Fanegas of Spain.

Example IV.—How many Barriques of Bourdeaux are equal to 50 Eimers of Leipsic? *See Table IV.*

50 Eimers of Leipsic.
1 Eimer of Leipsic = 4644 English Cubic Inches.
14033 English Cubic Inches = 1 Barrique of Bourdeaux.
Result, 16,546 Barriques of Bourdeaux.

EXAMPLE V.—How many Varas of Spain are equal to 359½ Ells of Hamburg? *See Table V.*

359½ Ells of Hamburg.
1 Ell of Hamburg = 22,58 English Inches.
33,38 English Inches = 1 Vara of Spain.
Result, 243,18 Varas of Spain.

EXAMPLE VI.—How many Feet of Turin are equal to 160 Rhineland Feet? *See Table VI.*

160 Rhineland Feet.
1 Rhineland Foot = 12,35 English Inches.
12,72 English Inches = 1 Foot of Turin.
Result, 155,34 Feet of Turin.

EXAMPLE VII.—How many Square Feet of Rome are equal to 90 of Lisbon? *See Table VII.*

90 Square Feet of Lisbon.
1 Square Foot of Lisbon = 167,547 English Square Inches.
137,358 English Square Inches = 1 Square Foot of Rome.
Result, 121,97 Square Feet of Rome.

EXAMPLE VIII.—How many Cubic Feet of Cologne are equal to 45 Cubic Feet of Sweden? *See Table VIII.*

45 Cubic Feet of Sweden.
1 Cubic Foot of Sweden = 1595,041 English Cubic Inches.
1270,229 English Cubic Inches = 1 Cubic Foot of Cologne.
Result, 56,507 Cubic Feet of Cologne.

EXAMPLE IX.—How many Geiras of Portugal are equal to 84 Dessetinas of Russia? *See Table IX.*

84 Dessetinas of Russia.
1 Dessetina of Russia = 13066,6 English Square Yards.
6970 English Square Yards = 1 Geira of Portugal.
Result, 157,47 Geiras of Portugal.

EXAMPLE X.—How many Miles of Denmark are equal to 33 Miles of Switzerland? *See Table X.*

33 Miles of Switzerland.
1 Swiss Mile = 9153 English Yards.
8244 English Yards = 1 Danish Mile.
Result, 36,638 Miles of Denmark.

ANCIENT WEIGHTS AND MEASURES.

TABLE XII.

Ancient Weights and Measures explained, and compared with English; from the most approved Authorities.

ANCIENT GREEK LONG MEASURES.

Two sorts of Long Measure were used in Greece; namely, the *Olympic* and the *Pythic*.

The Olympic measure was used in Peloponnesus, Attica, Sicily, and the Greek cities in Italy.

The Pythic measure was used in Thessaly, Illyria, Phocis, and Thrace, and at Marseilles in Gaul.

The divisions were the same in both, and were as follow: 4 Dactyli = 1 Palesta; 4 Palestæ = 1 Foot; $1\frac{1}{2}$ Foot = 1 Cubit.

10 Feet = 1 Decapodon; 600 Feet, or 400 Cubits = 1 Stadium.

The length of the foot is stated as follows:

Olympic foot, properly called Greek, according to	*Hutton*	12,108 English Inches.
	Folkes	12,072
	Cavallo	12,084
Pythic foot, also called natural foot, according to	*Hutton*.....	9,768
	Paucton	9,731

Hence, the Olympic Stadium was $201\frac{1}{2}$ English yards nearly; and the Pythic or Delphic Stadium, $162\frac{1}{2}$ yards nearly, and the other measures in proportion.

The Phyleterian foot is the Pythic cubit or $1\frac{1}{2}$ Pythic foot.

The Macedonian foot was 13,92 English inches; and the Sicilian foot of Archimedes 8,76 English inches.

ANCIENT GREEK SUPERFICIAL MEASURES.

Olympic Land Measure.

36 Olympic square feet = 1 Hexapodon; 64 Hexapoda = 1 Hemihectos; 2 Hemihecti = 1 Hectos or Modius; 6 Modii = 1 Medimnus or Jugerum.

Hence, the Olympic Jugerum is computed to equal 2 Roods 23 Perches, English.

Pythic Land Measure.

1666⅔ Square Cubits = 1 Hemihectos; 2 Hemihecti = 1 Modius; 6 Modii = 1 Medimnus, or Jugerum. Hence, the Pythic Jugerum = 2 Roods 29 Perches, English.

ANCIENT GREEK LIQUID MEASURES.

1½ Cyathus = 1 Oxybathon; 6 Cyathi = 1 Cotylus; 2 Cotyli = 1 Xestes; 6 Xestes = 1 Chous; 6 Choi = 1 Amphoreus; 2 Amphorei = 1 Keramion or Metretes.

The Keramion is stated by *Paucton* to have been equal to 35 French Pints, which equal 8⅔ English Gallons; and the inferior measures in proportion.

ANCIENT GREEK CORN MEASURES.

2 Xestes = 1 Chœnix; 4 Chœnices = 1 Hemihectos; 1½ Hemihectos = 1 Tetarlon; 2 Hemihecti = 1 Modius; 6 Modii = 1 Medimnus or Achana.

The Medimnus is stated by *Paucton* to equal 3½ French Boisseaux = 1¼ English Bushel, and the inferior measures in proportion.

ANCIENT GREEK WEIGHTS.

6 Chalcoi = 1 Obolus; 6 Oboli = 1 Drachm; 2 Drachms = 1 Didrachm.

20 Drachms = 1 Gold Statera, or Aureus; 100 Drachms = 1 Attic Mina.

60 Attic Mine = 1 Attic or Euboic Talent; 10 Attic Talents = 1 Gold Talent.

There was also a smaller Mina containing 75 Drachms.

Authors vary much in their statements of the Greek weights.

Thus, according to *Arbuthnot*,	the Attic Drachm	=	54,6 English Grains.
	the Attic Mina	=	5464
	the Attic Medicinal Mina..	=	6994
According to *Christiani*,	the Attic Drachm	=	51,9
	the Attic Mina	=	5189
	the Smaller Attic Mina....	=	3892
According to *Paucton*,	the Attic Drachm	=	69
	the Attic Mina	=	6900

Arbuthnot mentions also a very ancient Greek Drachm, which answered to 146,5 English Grains.

ANCIENT ROMAN LONG MEASURES.

6 Scrupula = 1 Sicilicum; 8 Scrupula = 1 Duellum; 1½ Duellum = 1 Semiuncia.

18 Scrupula = 1 Digitus; 1⅓ Digitus, or 24 Scrupula = 1 Uncia, or Inch.

3 Unciæ = 1 Palma; 12 Unciæ = 1 Pes, or Foot; 1½ Foot = 1 Cubit.

The fractions of the Foot were denominated as follows:

2 Unciæ = 1 Sextans; 3 Unciæ = 1 Quadrans, or Terruncium; 4 Unciæ = 1 Triens; 5 Unciæ = 1 Quincunx; 6 Unciæ = 1 Sexunx or Semis; 7 Unciæ = 1 Septunx; 8 Unciæ = 1 Bes, or Bessis; 9 Unciæ = 1 Dodrans; 10 Unciæ = 1 Dextans; 11 Unciæ = 1 Deunx.

ANCIENT ROMAN ITINERARY MEASURES.

2½ Pedes or Feet = 1 Gradus; 2 Gradus = 1 Passus; 2 Passus = 1 Decempeda. 1000 Passus = 1 Mile. The length of the Roman Foot is stated as follows, by different authors.

By *Bernard*.....	11,640	English Inches.
By *Picard* and *Hutton*	11,604	
By *Folkes*.....	11,592	
By *Raper*, (before Titus)	11,640	
By *Raper*, (after Titus).....	11,580	
By *Shuckburgh*, taken from rules.....	11,6064	
By the same, from buildings.....	11,6172	
By the same, from a tombstone	11,6352	

Hence, 11,6 English Inches seem to be a medium; and, therefore, the Roman Mile = 1611 English Yards, being 149 Yards less than the English Mile.

ANCIENT ROMAN LAND MEASURES.

100 Square Roman Feet = 1 Scrupulum of land; 4 Scrupula = 1 Sextulus.

1⅓ Sextulus = 1 Actus; 6 Sextuli, or 5 Actus = 1 Uncia of land; 6 Unciæ = 1 Square Actus.

2 Square Actus = 1 Jugerum; 2 Jugera = 1 Heredium; 100 Heredia = 1 Centuria.

The Actus was a slip of ground 4 Roman Feet broad and 120 long. The Jugerum was also divided into 12 Unciæ, and its fractions were denominated *Sextans, Quadrans,* &c. as the fractions of the Roman Foot.

Taking the Roman Foot as above, at 11,6 English Inches, the Roman Jugerum was 5980 English Square Yards, or 1 Acre 37½ Perches.

ANCIENT ROMAN CORN MEASURES.

4 Ligulæ = 1 Cyathus ; $1\frac{1}{2}$ Cyathus = 1 Acetabulum ; 4 Acetabula = 1 Hemina, or Trulla.

2 Heminæ = 1 Sextarius ; $1\frac{1}{2}$ Sextarius = 1 Chœnix ; 16 Sextarii = 1 Modius.

Paucton states the Sextarius to have been 0,6453 of a French Pint, which is equal to 36,94 English Cubic Inches ; hence the Modius was 591 Cubic Inches, or $\frac{3}{29}$ of an English Bushel.

ANCIENT ROMAN LIQUID MEASURES.

In liquid measures, the Sextarius and its divisions were used as above, and the larger measures were as follow :

6 Sextarii = 1 Congius ; 4 Congii = 1 Urna ; 2 Urnæ = 1 Amphora ; 20 Amphoræ = 1 Dolium.

The Sextarius being, as above, 36,94 English Cubic Inches, the Amphora = $7\frac{2}{3}$ English Gallons, and the Dolium = $153\frac{1}{3}$ English Gallons.

ANCIENT ROMAN WEIGHTS.

3 Siliquæ = 1 Simplium ; 6 Siliquæ = 1 Scrupulum ; 3 Scrupula = 1 Denarius of Nero.

$3\frac{3}{7}$ Scrupula = 1 Denarius of Papyrius ; 4 Scrupula = 1 Sextulus ; $1\frac{1}{2}$ Sextulus = 1 Sicilicum.

2 Sextuli = 1 Duellum ; 6 Sextuli, 7 Denarii of Papyrius, or 8 Denarii of Nero = 1 Uncia, or Ounce.

12 Unciæ = 1 Libra or Pound ; 100 Libræ = 1 Centumpondium.

The fractions of the Libra were also distinguished by the names of *Sextans, Quadrans, &c.* as the fractions of the Foot, see p. 257.

The Weight of the Roman Denarius, Ounce, and Pound, are stated as follows, by different authors.

By *Arbuthnot*,	the Denarius, (7th part of the Ounce).....	62,4 English Grains.
	the Ounce	437,2
	the Pound.....	5246,4
By *Christiani*,	the Denarius, (8th part of the Ounce).....	51,9
	the Ounce	415,1
	the Pound	4981,2
By *Paucton*,	the Denarius of Papyrius.....	61,6
	the Denarius of Nero	53,9
	the Ounce.....	431,2
	the Pound	5174,4

ANCIENT JEWISH, OR SCRIPTURE LONG MEASURES.

4 Digits = 1 Palm; 3 Palms = 1 Span; 2 Spans = 1 Cubit; 4 Cubits = 1 Fathom; 2 Fathoms = 1 Arabian Pole; 10 Poles = 1 Shœnus, or measuring line.

The Shœnus = 145 Feet 11 Inches English, and the rest in proportion. Thus the Scripture Cubit was 22 inches nearly.

ANCIENT JEWISH ITINERARY MEASURES.

400 Cubits = 1 Stadium; 5 Stadia = 1 Sabbath-Day's Journey; 10 Stadia = 1 Eastern Mile; 3 Eastern Miles = 1 Parasang; 8 Parasangs = 1 Day's Journey.

1 Day's Journey = $33\frac{1}{6}$ English Miles, and the Sabbath Day's Journey = $\frac{2}{3}$ of an English Mile nearly.

ANCIENT JEWISH DRY MEASURES.

20 Grachal = 1 Cab; $1\frac{4}{5}$ Cab = 1 Gomor; $3\frac{1}{3}$ Gomor = 1 Seah; 3 Seahs = 1 Ephah; 5 Ephahs = 1 Leteeh; 2 Leteeh = 1 Comer.

The Comer = 2 Bushels 1 Pint English, and the subordinate measures in proportion.

ANCIENT JEWISH LIQUID MEASURES.

$1\frac{1}{3}$ Caph = 1 Log; 4 Logs = 1 Cab; 3 Cabs = 1 Hin; 2 Hins = 1 Seah; 3 Seahs = 1 Bath, or Ephah; 10 Ephahs = 1 Chomer, Homer, or Corus.

The Chomer = 75 Gallons 5 Pints English, and the other measures in proportion.

ANCIENT JEWISH WEIGHTS.

60 Shekels = 1 Maneh; 50 Maneh = 1 Talent.

The Talent = 113 lb. 10 oz. 1 dwt. 10 gr. Troy, and the other weights in proportion.

For a more full and particular account of Scripture Weights and Measures, see the *Prologomena to Hewlett's Bible*, from which the above Statement is chiefly extracted.

ANCIENT EGYPTIAN WEIGHTS.

The Talent was the principal weight, as well as money among many of the Eastern nations; but it was not uniform. In Egypt it was divided into 60 Minæ, and each Mina into 100 Drachms, and = 86lb. 8 oz. 16 dwt. English Troy Weight.

The Mina, sometimes called the Pound, was divided into 16 ounces; but there was another pound, called the Litra, or Ratel, which was divided into 12 ounces. This weight was used throughout Arabia and Asia Minor, and answered to 6886 Troy Grains. The ounce was divided into a certain number of Dirhems, each of 12 Carats, and each Carat contained 4 grains. *Bishop Cumberland* deduces the English Avoirdupois Pound from the Mina of Egypt, and the Troy Pound from the Ratel; but authors differ much on this subject.

ANCIENT EGYPTIAN LONG MEASURES.

2 Fingers = 1 Condyle; 2 Condyles = 1 Palm; 4 Palms = 1 Geometrical Foot; 5 Palms = 1 Cubit.

This Cubit was the distance from the elbow to the joint of the wrist, and answered to 13 English Inches nearly. In other countries the cubit was reckoned from the elbow to the end of the middle finger, and was about one-half more than that of Egypt.

The Egyptian cubit was the standard to which many of the ancient nations referred their measures, and, according to *Paucton*, was that mentioned by *Herodotus*, *Pliny*, and other ancient authors in their scientific computations. He also supposes this to be the cubit mentioned in the Book of Judges, ch. iii. v. 16.

For a more comprehensive and minute account of Ancient Weights and Measures, see *Arbuthnot's Tables*; *Paucton's Metrologie*; and *Gibbon's Miscellaneous Works.*

A

GENERAL INDEX

AND

COMMERCIAL DICTIONARY,

CONTAINING

General References, and also Definitions of Commercial Terms, including Monies, Coins, Weights, and Measures; which are either explained by immediate definitions, or by references.

N.B. The Roman numerals refer to the volumes; the figures to the pages.

A

AAM, a liquid measure of Amsterdam, Antwerp, &c.; i. 10, 21.

ABANDONMENT, the act of relinquishing or giving up goods to creditors or underwriters, either in lieu of a debt, or to avoid the payment of charges.

ABAS, a Persian weight for pearls; i. 278.

ABASSI, or ABASSEE, a Persian coin; i. 151, 277.

ABATEMENT, a deduction from a debt or contract.

ABUQUELP, the same as *Griscio*, an Egyptian coin; i. 4.

ACCEPTANCE of a BILL; ii. 3.

ACCOMMODATION, a term applied to the acceptance of a bill, when the drawee only lends his name; and the drawer engages to furnish him with the means of payment before the bill becomes due.

ACCOUNT CURRENT, the personal account of a merchant or trader with each of his correspondents or customers, a copy of which account is transmitted to the person whose name it bears, showing how affairs stand between the parties at the current or present time when made out.

ACCOUNT SALES, an account showing the net proceeds of the sale of any cargo or consignment of goods.

ACETABULUM, an ancient Roman corn measure; ii. 258.

ACHANA, an ancient Greek corn measure; ii. 256.

ACHTEL, or ACHTELING, a measure of capacity in Germany; i. 148, 350, 369.

ACHTERLIS, a measure of capacity in Berne; i. 39.

ACINO, a weight for gold and silver in Naples and Sicily; i. 263, 313.

ACQUITTANCE, a discharge, in writing, for a sum of money, acknowledging it to have been paid.

ACRE, a land measure in England, and some parts of the Continent; i. 195, 224, 226, 309; ii. 249.

ACT OF HONOUR, an instrument drawn by a notary when a bill is accepted for the honour of another person; ii. 6.

ACTION, the name for shares in some foreign banks; i. 145.

ACTUS, an ancient Roman land measure; ii. 257.

ADARME, a weight in Spain; i. 6, 56, 266, 321, 342.

ADJUSTMENT, the settling of the averages or losses on policies of insurance; see *Average*.

ADMINISTRATOR, a person who is allowed to administer in the ecclesiastical court, by which he takes charge of the personal effects of one who dies intestate.

ADOWLY, a weight in Bombay; i. 96.

ADVICE, the information given *by letter* of any commercial transaction.

ADULTERATION, the act of debasing by an improper mixture.

ADY, a long measure in the Jaghire territory; i. 93.

AEMGEN, a liquid measure in Prussia; i. 35.

AFFIDAVIT, an oath sworn in writing before some person authorised to receive it.

AFFREIGHTMENT, the act of loading a vessel.

AGASTERA, a liquid measure in some of the Ionian Islands; i. 372.

AGENT, a person duly authorised to act for another.

AGIO; i. Introduction, xxxiv; also, pages 17, 186.

AGIRAGUE, a weight in Guinea; i. 167.

AGTENDEEL, a corn measure in Holland; i. 297.

AHM, a measure for wine in Germany, Holland, &c.; i. 3, 77, 171, 206, 277, 287, 297; ii. 235.

AKEY, an African weight; i. 167.

ALBAAJER, see *Abassi*.

ALBERTS DOLLAR, a Dutch silver coin. It is used also as a money of account at Liban and Riga; i. 207, 288.

ALBERTS GROSCHEN, a money of account in Libau; i. 207.

ALBUS, a small coin and money of account at Cassel, Cologne, and other places in Germany; i. 63, 70, 261, 285.

ALLOTTING of goods, is when several persons buy a cargo or quantity of goods jointly, which they divide into as many parcels or lots as there are buyers, and these lots are afterwards drawn.

ALLOWANCES in sales of goods, in London; i. 228. Amsterdam, 11. Bourdeaux, 47. Cairo, 59. Genoa, 159. Gibraltar, 164. Hamburg, 173. Leghorn, 201. Rotterdam, 293.

ALLOWANCES in standarding coins and bullion; ii. 174.

ALLOY in coins; i. Introduction, xxviii.

ALMUD, a liquid measure in Portugal and some parts of Turkey; i. 73, 212, 247. It is also a corn measure in Spain and Barbary, i. 23, 260, 343; ii. 235.

ALMUT, a corn measure in Majorca; i. 248.

ALQUEIRE, or ALQUIERE, a measure for corn in Portugal; i. 212, 247; ii. 229, &c.

ALTIN, a silver coin in Russia; i. 299.

ALTMICHLIC, a Turkish silver coin; ii. 168.

AMBULANT, a name given at Amsterdam to brokers that have not been sworn before a magistrate.

AMMA, a weight in the Sunda Isles; i. 118.

AMMONAM, a dry measure in Ceylon; i. 105.

AMOLA, a liquid measure at Genoa; i. 159.

AMPHORA, an ancient Roman liquid measure; ii. 258.

AMPHOREUS, an ancient Greek liquid measure; ii. 256.

ANFORA, a liquid measure in Italy; i. 346.

ANGEL, an old gold coin in England; i. Introduction, xxx; also, page 216.

ANGSTER, a money of account in Switzerland; i. 374.

ANGULLA, a long measure of Bengal; i. 89.

ANKER of brandy, 10 gallons. The anker is also a liquid measure in Germany, Holland, Prussia, &c.; i. 10, 35, 77, 83, 171, 273, 287, 297, 301, 324; ii. 234, &c.

ANNA, a money of account and weight in India; i. 87, 89, 93, 94.

ANNUITY, a sum paid or received annually.

ANNUITIES, annual payments; i. 240.

ANTEDATE, a fictitious date, prior to the true date of a bond, bill, &c.

ANTHAL, a liquid measure in Hungary; i. 192; ii. 235.

ARBITRATION, a mode of settling a dispute by referring the question to the decision of one person or more, without any appeal to law.

ARBITRATION OF EXCHANGE; ii. 107, &c.

ARBITRATION OF MERCHANDISE; ii. 134.

ARBITRATION OF SPECIE AND BULLION; ii. 131.

ARCHIM, the name given to the Long Ell used in Turkey; i. 73; ii. 239.

ARDEB, a measure for grain in some parts of Africa; i. 2.

ARE, the unit for superficial measures in the new French system; i. 135, 136; ii. 251.

ARIENSE, a division of the Mark weight in some parts of Spain; i. 23, 27.

ARISH, a long measure in Persia; i. 278; ii. 241.

ARN, a cloth measure in Dantzic; i. 83.

ARPENT, a measure for land in the old French system; i. 134; ii. 249.

ARRANZADA, a land measure of Spain; i. 323; ii. 249.

ARRATEL, the Libra or Pound of Portugal; i. 212; ii. 227.

ARROBA, or ARROVE, a weight in Spain and Portugal; i. 6, 23, 212, 322, 342; also a liquid measure in Spain; i. 248, 322, 343; ii. 234, &c.; and a dry measure in Morocco; i. 260.

ARSHEEN, or ARCHIN, a long measure in Russia; i. 301; ii. 242.

ARTABA, a corn measure in Persia; i. 278; ii. 232.

AS, *plur. Asen*, a small Dutch weight, used also at Hamburgh, in Switzerland, and in Sweden; i. 9, 169, 329, 375.

ASNÉE, an old dry and liquid measure at Lyons; i. 246; ii. 231, 236.

ASPER, a small Turkish coin and money of account; i. 3, 4, 5, 57, 72, 276, 307, 314, 337.

ASSAY, a process by which the fineness of bullion or coins is determined, by separating, from any small part of the metal, the alloy from the pure, and ascertaining the proportion; ii. 171.

ASSIGNEE, a person appointed to manage the affairs of a bankrupt.

ASSURANCE, see *Insurance*.

ASTAH, a measure for cloth in the Prince of Wales's Island; ii. 241.

ASTLER, a corn measure in Louvain; i. 21.

ATOMO, a long measure in Italy; i. 256.

ATTACHMENT, the act by which a creditor may claim and seize the goods of his debtor, in whatever hands he finds them.

AVA, a long measure in Cadiz; i. 57.

AVERAGE, a contribution made for losses at sea: it is distinguished into general and particular. *General average* is a proportionable contribution, paid by all the proprietors of a ship and cargo for losses, which are made with a view to safety, such as throwing goods overboard, or cutting away masts to prevent shipwreck. *Particular average* is a contribution for such damages or losses as may happen from the common accidents of the sea; in which case the average must be paid by the proprietors of the article that suffers the damage.

AVERAGE TARE; i. 228.

A VISTA, at sight.

AVOIRDUPOIS, the commercial weight in England; i. Introduction, xxi.; i. 220, 225; ii. 225.

AUGUST, a gold coin of Saxony; i. 161, 205. Assay and value; ii. 160. Impressions; 205.

AUME, see *Aam*, or *Ahm*; also the name for a tierce of wine of 42 gallons.

AUNE, a measure for cloth in France and Switzerland; i. 28, 134, 364; ii. 238, 252.

AUREUS, an ancient Greek weight; ii. 256.

AWARD, the judgment of an arbitrator for terminating a difference.

AZUMBRE, a liquid measure in Spain; i. 56, 150, 248, 322.

B

BACILE, a dry measure, and also a land measure, in the Ionian Islands; i. 372, 373.

BACINE, a dry measure in Corsica; i. 80.

BADDAM, a species of almond, used as money in some parts of India; i. 103, 119.

BACHEL, a corn measure in the Morea; i. 276.

BAG, a measure and weight of various contents.

BAGATTINO, a copper coin of Venice; i. 345.

BAHAR, a weight used in some parts of India and of Arabia; i. 40, 98, 122, 257.

BAILLE, a measure for coals in Rochelle; i. 292.

BAJOCHELLO, a base silver coin at Rome; i. 293.

BAJOCCO, a base coin at Rome, Bologna, &c.; i. 18, 42, 243, 292.

BAJOIRE, a silver coin in Geneva; i. 152.

BALANCE, the difference between the debtor and creditor side of an account.

BALANCE OF TRADE, the difference between the commercial exports and imports of one country, with respect to another.

BALE, a quantity of packed goods.

BALLAST, or KENTILLAGE, any heavy matter placed in the hold of a ship, to make her sink to a proper depth, so that she may carry sufficient sail without the danger of oversetting.

BALLIAGE, a small duty paid to the city of London by aliens and others on the exportation of certain commodities.

BALLOON, 24 Reams of a particular sort of paper manufactured at Marseilles for the Levant.

BALLOT, of Paper, in Sweden, 10 Reams.

BALY, a weight in Sumatra; i. 112, 123.

BAMBOE, a measure for rice in Sumatra, the Molucca Islands, &c.; i. 97, 120.

BANCO, the bank money of Genoa, Hamburg, Venice, &c.; i. Introduction, xxxiv. 155, 167, 344; also the paper currency of Sweden; i. 333.

BAND, a weight used on the Gold Coast for weighing gold dust, and equal to 2 Ounces Troy.

BANKS; i. Introduction, xxxvi.

BANK of Altona; i. 7. Amsterdam, 17. Austria, 351. Berlin and Breslau, 36. Copenhagen, 79. England, 237. France, 145. Genoa, 154. Hamburg, 186. Ireland, 195. Netherlands, 17. Russia, 302. Scotland, 310. Venice, 347. Vienna, 351. United States, 356.

BANK BILL, a note signed by one of the cashiers of the Bank of England, promising to pay a certain sum of money at an appointed time.

BANK NOTE, a promissory note issued by a bank, payable to bearer on demand; i. 237.

BANK, private; i. 239, 311.

BANKER, a proprietor of a bank or banking-house.

BANKRUPT, a person in trade who cannot make good his payments, and against whom, therefore, a commission of bankruptcy has been taken.

BANQUIER, on the Continent, means an exchange merchant, or person who deals in bills of exchange.

BAR, a French weight; i. 137; ii. 251.

BARBONE, a silver coin in Lucca; i. 243; ii. 164. Impressions; 191.

BARCELLA, a corn measure in Majorca; i. 248.

BARCHET, a term used in reckoning in Germany; i. 164.

BARCHILLA, a corn measure in Spain; i. 6, 343.

BARIL, a liquid measure in Portugal; i. 212.

BARILE, a liquid measure in Italy and Sicily; i. 18, 159, 264, 294, 314; ii. 234, &c.

BARLEY-CORN, $\frac{1}{3}$ inch; i. 223, 226.

BARRATRY, a fraud committed by the master or crew of a ship on the owners or insurers; such as sinking, deserting, or taking away the ship, or embezzling the cargo.

BARREL, an ale and beer measure; i. 223, 227. It is also used for sundry dry goods.

BARREL, of corn, in Ireland; i. 193.

BAROTTI, a weight in the Molucca Isles; i. 120.

BARRIQUE, a measure for wine or brandy, in some parts of France, as at Bourdeaux, Rochelle, &c.; i. 262, 292; ii. 234, &c. It is also used for a hogshead of sugar.

BARTER, the exchanging or trucking of one commodity for another.

BARUAY, see *Candy*.

BASSA, a liquid measure of Verona; i. 348; ii. 237.

BATH, an ancient Jewish measure of capacity; ii. 259.

BATMAN, a weight used in Persia, and at Aleppo, Constantinople, Smyrna, and other places in the Levant; i. 4, 72, 278, 315; ii. 226, 227.

BATTA, a per centage in the East Indies; i. 86, 87.

BATTEL, a measure of capacity in the Philippine Isles; i. 107.

BATZE, a base silver coin in Switzerland, and also in some parts of Germany; i. 23, 27, 38, 161, 261, 269, 305, 334.

BEAK, a weight in Mocha; i. 257.

BECHER, a measure of capacity in Switzerland and Germany; i. 28, 39, 274, 350.

BECSKA, a liquid measure in Poland; i. 280.

BEDOOR, a weight at Malacca; i. 108.

BENDA, a weight in Guinea; i. 167.

BENDIKY, a gold coin in Morocco; i. 260.

BERKOWITZ, or BERQUET, a Russian weight; i. 301.

BERRI, an itinerary measure in Turkey; ii. 250.

BES, or BESSIS, an ancient Roman long measure; ii. 257.

BESLICK, a small Turkish silver coin; ii. 169.

BESON, a liquid measure at Augsburg; i. 25.

BICE, or BIS, see *Pice*.

BICHERÉE, an old land measure in France; i. 246.

BICHET, an old dry measure at Lyons; i. 246.

BIGGAH, a land measure in the East Indies; i. 89.

BIGONCIA, a liquid measure in Venice; i. 346.

BILL, a term generally applied to a draft, advertisement, or account.

BILL OF ENTRY, a note of the particulars of goods entered at the custom-house.

BILL OF EXCHANGE; ii. 1.

BILLS, EXCHEQUER, securities issued by government, which bear interest until paid off. They are mostly for £100, £500, or £1000 each; some of them bear interest at the rate of 3*d.* others at the rate of 3½*d.* per day for every £100.

BILL OF HEALTH, an account of the health of a crew, given by the captain or master of a vessel.

BILLS, INDIA, bills drawn in India on the East India Company in London, and payable at the India House.

BILLS OF LADING, papers signed by the master of a ship, acknowledging the receipt of certain goods on board his vessel, and promising to deliver them at the intended place. It is customary to make out three bills of lading, one to be left with the shipper, the second to be held by the captain of the ship, and the third to be sent to the person to whom the goods are consigned, by which he can claim them on their arrival.

BILLS, NAVY, bills issued by the navy board in payment of stores for the ships, dock-yards, &c. They are made payable at 90 days, with an interest of 3½*d.* per day on every £100.

BILL OF PARCELS, an account given by the seller to the buyer, containing the particulars of the purchase.

BILL OF SALE, a deed by which a right or interest in certain goods is transferred.

BILL OF STORE, a licence granted at the custom-house to merchants or ship-owners, allowing them to carry, custom free, all provisions and stores for their voyage.

BILL OF SUFFERANCE, a licence granted to a merchant at the custom-house, allowing him to trade from one port to another.

BILLS, VICTUALLING, bills issued by the victualling board, as navy bills are by the navy board.

BILLON, base metal, either of gold or silver, in which copper is predominant.

BISACCIA, a corn measure in Sicily; i. 313.

BISMERPOND, a weight in Norway; i. 32.

BIT, or BITT, a small coin in the West Indies; i. 360, &c.

BLANCA, a money of account in Malaga; i. 248.

BLAFFERT, a small coin at Cologne; i. 70.

BLAMUSER, a money of account in some parts of Germany; i. 262.

BLANK, a division of the English Grain Troy; i. 219.

BLANK CREDIT, the permission which one house gives to another to draw on it to a certain extent at any time, in the way of accommodation.

BLANKEEL, or BLANQUILLO, a small coin and money of account in Morocco; i. 260.

BOBBIN of undressed flax, about $\frac{3}{4}$ of a cwt.

BOCCALE, a wine measure in Italy; i. 18, 43, 127, 255, 294, 340, 372.

BÖHMEN, a money of account in Prague; i. 280.

BOISSEAU, a measure for corn in the old system in France, varying much in different parts of the country; i. 133, 262, 292, 306, 327; ii. 229, 252.

BOISSON, a liquid measure in the old system in France; i. 133.

BOLL, a corn measure in Scotland, and in some parts of England; i. 310.

BOLOGNINO, a copper coin at Bologna, &c.; i. 18, 42, 243, 258.

BOLT, of canvas, 28 ells.

BOND, a deed or obligation by which a person binds himself, or his heirs, to pay a certain sum of money at an appointed time; ii. 9.

BONDS, INDIA, bonds issued by the East India Company of £50 and £100 each, bearing interest of 5 per cent. per annum, which interest is paid at the India House, in London.

BOND, POST OBIT, a bond payable after the death of the person whose name is therein specified.

BONDED GOODS, see *Warehoused Goods*.

BOOBOOT, a weight in the Sunda Isles; i. 118.

BOOK OF CARGO, or LOADING, a book kept by the mate of a trading vessel, containing a particular account of the goods on board.

BOOK OF RATES, a book showing the duty to be paid at the custom-house for goods exported or imported.

BOOT, a wine measure in Antwerp; i. 21.

BORBI, or BURBI, a copper coin in Egypt; i. 4.

BORJOOKE, glass beads used as money in Abyssinia; i. 1.

BOTTA, a liquid measure in Spain, Italy, Sicily, &c.; i. 57, 248, 264, 294, 314, 346.

BOTTLE, of wine, about 5 to a gallon; of aquafortis, 4 gallons.

BOTTOMRY, a contract or loan on a ship in the nature of a mortgage; but differing from other loans and mortgages, inasmuch as the interest is higher, and the security not so certain; for, if the ship be lost, neither loan nor interest can be demanded.

BOUNTY, a premium given for the encouragement of some branch of trade, manufacture, or agriculture.

BOURBE, a money of account in Tunis; i. 337.

BOZIA, a liquid measure in the Ionian Isles; i. 372.

BOZZA, a liquid measure of Venice; i. 346.

Braça, a land measure in Portugal; i. 213.

Box, of aloes, 14 lb.

Braccio, a measure for cloth in Italy; ii. 238.

Bras, see *Aune*.

Brasada, a land measure in Spain; i. 61.

Brassage, charges for mint expenses.

Brasse, a short Ell at Basil; i. 28; ii. 238.

Braza, a long measure of Spain; i. 322, 343.

Brent, a liquid measure in Bern; i. 39.

Brenta, a liquid measure at Bergamo, and some other parts of Italy; i. 31, 255, 340, 348; ii. 234, &c.

Brokers, persons appointed to transact business between merchants and others; thus, there are ship brokers, insurance brokers, exchange brokers, stock brokers, &c.

Brokerage, the commission paid to brokers.

Bucket, of chalk; 1½ bushel.

Buddam, a weight for pearls at Bombay; i. 95.

Budgerook, a money of account on the Malabar coast; i. 98, 103.

Bullion, gold and silver uncoined. Rules for standarding bullion; ii. 173.

Buncall, a weight used in some parts of India, as at Acheen and Malacca; i. 97, 114.

Bundle, of brown paper, 40 quires.

Burden, of steel, 180 lb.

Busche, a money of account of Aix-la-Chapelle; i. 2.

Bushel, a measure for corn and dry commodities in England; i. 194, 221, 228; ii. 230.

Bussolo, a corn measure in Florence; i. 130.

Busuck, a weight in Borneo; i. 119.

Butt, a liquid measure in England; i. 223, 227.

Butt, of salmon, 84 gallons.

C

Cab, an ancient Jewish dry measure; ii. 259.

Cade, of herrings, 500. Of sprats, 1000.

Cado, a corn measure at Santa Maura; i. 372.

Caffise, a measure for corn in Barbary, and in some parts of Spain; i. 5, 6, 337, 338; ii. 232.

Caffiso, a measure for oil in Sicily, Malta, and at Trieste; i. 250, 314, 336; ii. 236.

Cagliareso, a copper coin in Sardinia; i. 308.

CAHIZ, a measure for corn in Spain; i. 23, 322, 343; ii. 229, &c.

CAHIZADA, a measure for land in Spain; i. 343.

CAHAUN, a coin in Bengal; i. 88.

CAMBIO, or CAMBIUM, Exchange.

CAMBIST, an exchange merchant, or a person skilled in exchanges.

CANDACA, a dry measure in the Mysore; i. 117.

CANDARINE, a money of account in China, &c.; also a weight; i. 66, 197.

CANDY, a weight in the East Indies; i. 92, 96, 122.

CANHADA, or CANADE, a liquid measure in Spain and Portugal, and also in Ceylon; i. 105, 150, 212.

CANNA, or CANNE, a measure for cloth in Italy, and in the south of France, Spain, &c.; ii. 238, 245.

CANNE, a liquid measure at the Cape of Good Hope; i. 63.

CANTARA, a liquid measure in Spain; i. 6, 23, 150, 248, 322; ii. 234, &c.

CANTARELLO, a weight in Sardinia; i. 308.

CANTARO, a weight used in Italy, Egypt, and the Levant; i. 3, 4, 58, 72, 130, 159; ii. 226.

CAPELLONE, a silver coin of Modena; i. 258.

CAPH, an ancient Jewish liquid measure; ii. 259.

CAPICHA, a corn measure in Persia; i. 278.

CAPIN, a weight in Junkceylon; i. 21, 123.

CAPITAL, the amount of any sum or stock.

CARAFFO, a liquid measure in Naples; i. 264.

CARAGE, of lime, 64 bushels.

CARAT, a word used in expressing the fineness of gold; i. Introduction, xxix.; also a weight for diamonds; 91, 220. It is likewise a small coin in Arabia; i. 257.

CARGA, a measure for wine and oil at Barcelona; i. 27; ii. 234; also a weight in Spain, &c.; i. 6, 343; and a corn measure in Candia; i. 62; ii. 230.

CARGADOR, in Portugal and Holland, a ship broker.

CARGO, a ship's loading.

CARIOLLA, a measure by which salt is sold in Santa Maura; i. 372.

CARIVAL, a money of account in some parts of the East Indies; i. 99.

CARL D'OR, a gold coin of Brunswick; i. 53, 161. Assay and value; ii. 157. Impressions; 180.

CARLINO, a small coin and money of account in some parts of Italy; i. 249, 263, 293, 308, 313. Also a gold coin in Piedmont; i. 339. Assay and value: ii. 159. Impressions; 198.

CARO, a long measure in Italy; i. 264.

CAROBA, a money of account at Tunis; i. 337.

CAROLIN D'OR, a gold coin of Bavaria, Hesse Darmstadt, Wirtemberg, and Augsburg. Assay and value; ii. 157, &c. Impressions; 179, &c.

CAROTEEL, of cloves, from 4 to 5 cwt.; of mace, about 3 cwt.; of nutmegs, from 6 to 7½ cwt.; of currants, from 5 to 9 cwt.

CARRATA, a cubic measure in Carrara; i. 63.

CARRÉ, a land measure in the French West India Islands; i. 364.

CARRO, a dry and liquid measure in Italy; i. 264, 340.

CARTE, a corn measure at Nancy; ii. 231.

CARVAL, or CARWALL, a measure for grain in Aurungabundar, &c.; i. 99, 116.

CARUBE, a money of account in Algiers; i. 5.

CASH, a small coin in China and India; i. 66, 90, 97. Also a general term for real money.

CASH MONEY, the established coin of Hanover; i. 189.

CASHIER, one whose business it is to receive and pay money.

CASK, of sugar, from 8 to 10 cwt.; of almonds, about 3 cwt.; of raisins, about 1 cwt. Also a general name for close wooden vessels.

CASS, a wine measure in Cyprus; i. 81; ii. 235.

CASSA, the name given to current money in Holland; i. Introduction, xxxiv.

CASTELLANO, a weight for gold in Spain; i. 65, 253, 320.

CATANA, a long measure in some parts of Italy; i. 264.

CATTY, a weight at Canton and in India; i. 67, 197; ii. 225. Also a money of account in Java; i. 100.

CAVALLO, a copper coin of Naples; i. 263.

CAVEER, or CABEER, a money of account at Betelfagui and Mocha; i. 40, 257.

CAVEZZO, a long measure in Cremona; i. 81.

CAUL, a measure for rice, &c. in Sumatra; i. 97.

CAWNEY, a land measure at Madras; i. 93.

CEDOLA, a sort of bank note at Rome; i. 293.

CELEMINE, a corn measure in Spain; i. 23, 150, 322, 343.

CENSAL, a broker, so called in the south of France, in Italy, and in the Levant.

CENT, a money of account and copper coin of America; i. 353; in the Ionian Isles; 370; and also in the new monetary system of the Netherlands; ii. 267.

CENTESIMO, a money of account in Italy; i. 251, 254, 344.

CENTIARE, CENTIMETRE, &c. the 100th part of the French are, metre, &c.; i. 135, 136; ii. 251.

CENTIME, a money of account in the new system of France; i. 141.

CENTINAJO, the hundred weight in Italy.

CENTLET, a liquid measure in Ragusa; i. 284.

CENTNER, the hundred weight in Germany, Holland, &c.; i. 9, 21, 25, 34, 84.

CENTUMPONDIUM, an ancient Roman weight; ii. 258.

CENTURIA, an ancient Roman land measure; ii. 257.

CERTIFICATE, a paper certifying any thing. A *Certificate* is granted to a bankrupt, with the consent of his creditors, after he has surrendered and made a full discovery of all his property, according to law. To export goods by *certificate* is when foreign goods which have been imported, are re-exported within the time limited by act of parliament, and a drawback is allowed on them.

CHAIN, for measuring land, generally 4 Poles; i. 224.

CHAIN RULE, explained and exemplified; ii. Introduction, v.

CHALDER, a dry measure in Scotland; i. 310.

CHALDRON, a dry measure in England, particularly for coals; also a weight at Newcastle; i. 222.

CHAMBER OF ASSURANCE, in France, a society of merchants, carrying on the business of insuring.

CHAMBER OF COMMERCE, an assembly of merchants, where the affairs relating to trade are discussed and settled.

CHAR, a wine measure in Geneva; i. 153.

CHARGE, a measure of capacity in France and Switzerland; i. 252, 259, 269, 305; ii. 231. Also a weight at Antwerp; i. 21.

CHARGES, the necessary expenses attending any mercantile transaction.

CHARGES, on exchange operations; ii. 126.

CHARKEY, a Russian liquid measure; i. 301.

CHARTER, a written evidence of some grant or privilege.

CHARTER PARTY, a contract executed between the person who hires a ship, and the owner, setting forth the terms, &c. A ship is said to be chartered, when hired for a voyage.

CHATTACK, a weight and also a land measure in the East Indies; i. 89.

CHATTELS, all kinds of goods and property.

CHAYÉ, a silver coin of Persia; i. 277.

CHECK, an order for money on a banker; ii. 10.

CHENICA, a corn measure in Persia; i. 278.

CHEQUEE, a Turkish weight; i. 30, 72, 315; ii. 222.

CHERASSI, a gold medal stamped in Persia, not properly a coin; i. 277.

CHEST, an uncertain quantity; of isinglass, $3\frac{1}{2}$ cwt.; of cochineal, $1\frac{1}{2}$ cwt.

CHETWERT, CHETWERICK, and CHETWERTKA, three corn measures in Russia; i. 301; ii. 232.

CHEVISANCE, a composition between debtor and creditor.

CHILO, a dry measure in Cerigo; i. 372.

CHISE, see *Purse*.

CHITTACK, see *Chattack*.

CIVADIER, a corn measure at Marseilles; i. 252.

CHŒNIX, an ancient Greek and Roman corn measure; ii. 256, 258.

CHOOSOCK, a weight in the Sunda Isles; i. 118.

CHOPA, a measure of capacity in Sumatra; i. 97.

CHOPINE, a liquid measure in the old system of France; i. 133, 327.

CHOPPIN, a liquid measure in Scotland; i. 310.

CHOUS, an ancient Greek liquid measure; ii. 256.

CHOW, a nominal weight used for pearls in the East Indies; i. 92, 95.

CHRISTIAN D'OR, a Danish gold coin; i. 75, 161. Assay and value; ii. 157. Impressions; 182.

CHROTT, a corn measure in Francfort; i. 148.

CHUNDOO, a measure of capacity in Ceylon; i. 105.

CINQUINO, a money of account in Naples; i. 263.

CIRCULAR, in commerce, a letter sent to different merchants giving notice of the establishment of a house or an alteration in the firm.

CIRCULATION OF EXCHANGES; ii. 138.

CLAFTER, a long measure in Germany and Switzerland; i. 39, 50, 83, 376.

CLEARING, a method adopted by city bankers for exchanging the drafts on each others houses and settling the difference; ii. 10.

CLEARING, with respect to a ship, is registering her name and particulars of her cargo in the books of the custom-house, on leaving a port.

CLOFF, or CLOUGH, an allowance in the weight of goods; i. 228.

CLOVE, a weight for wool and cheese in England; i. 220.

COB, the name given to the Hard Dollar in Gibraltar; i. 164.

COBIDO, a long measure in Mocha; i. 258.

COBRE, see *Covid.*

COCA, a measure for rice in Japan; i. 197.

COCKET, a custom-house warrant, given on the entry of goods, to show that they have paid the duty.

CODO, a long measure in Spain; i. 57.

COFFALA, a weight for gold and silver in Mocha; i. 257.

COFFINO, a dry measure in Cyprus; i. 81.

COHI, a measure for corn at Siam; i. 118.

COINS, definition of; i. Introduction, xxvii. History of English; i. Introduction, xxix. Tables of coins; ii. 154 to 170. Calculations of coins; ii. 171 to 176. Explications of coins; ii. 177 to 219.

COLA, a weight of Syria; i. 4.

COLAGA, a dry measure in the Mysore; i. 117.

COMMASSEE, a copper coin at Betelfagui and Mocha; i. 40, 257.

COMMERCE, traffic between different countries, or mercantile business in general.

COMMERCIAL PAR; ii. 13.

COMMISSION, a percentage given to agents or factors, for transacting the business of others; i. Introduction, xxxv.

COMMISSION OF BANKRUPTCY, an order under the great seal, directing five or more commissioners to inquire into the affairs of a bankrupt.

COMPANY, a society or partnership in trade or commerce.

COMPOSITION, part of a debt taken in lieu of the whole.

COMPROMISE, settling a difference by making some concessions on both sides.

CONDORINE, see *Candarine*.

CONDYLE, an ancient Egyptian long measure; ii. 260.

CONGUIS, an ancient Roman liquid measure; ii. 258,

CONQUE, a measure for corn and salt at Bayonne; ii. 229.

CONSIGNEE, the person to whom goods are consigned.

CONSIGNMENT, the sending or delivering over of goods to the care of a factor.

CONSTITUTION COINS, of Germany; i. 163.

CONTINGENT, the proportion that falls to the share of a person in any business or adventure.

CONTO OF REES, one thousand milrees.

CONTRABAND TRADE, that which is prohibited by law.

CONTRACT, a covenant or agreement between two or more persons.

CONTRIBUTION, see *Average*.

CONVENTION COINS, of Germany; i. 162, 189.

CONVOY, ships of war sailing with other ships, in order to protect them.

COOME, a corn measure in England; i. 221, 228.

COOP, a corn measure in Holland; i. 10.

COPANG, a gold coin in Japan; i. 196. Assay and value; ii. 161. Impressions; 218. Also, a money of account in Sumatra, i. 97.

CO-PARTNERSHIP is when two or more persons unite in trade, and agree to participate in the profits and losses, according to their respective shares in the capital.

COPECK, a money of account and copper coin in Russia; i. 276, 299.

COPELLO, a corn measure in Piedmont; i. 340.

COPPA, a corn measure in Ancona; i. 18.

COPPO, a measure for oil at Lucca; i. 244; ii. 235.

COPSTICK, or COPFSTUCK, a silver coin in many parts of Germany; i. 48, 69, 162, 261, 348. Assay and value; ii. 162, &c. Impressions; 178, &c.

CORBA, a measure of capacity at Bologna and other places in Italy; i. 43; ii. 229, 234, &c.

CORD, a pile of wood, 4 feet long, 4 feet broad, and 8 feet deep.

CORDE, an old French land measure; i. 307.

CORGE, in Bombay, 20 pieces; i. 96.

CORNADO, a money of account in Malaga, &c.; i. 248, 265.

CORNEY, a dry measure in Ceylon; ii. 105.

CORONILLA, a gold coin of Spain; i. 319. Assay and value; ii. 160. Impressions; 207.

CORTANE, a measure of capacity in Barcelona and Majorca; i. 27, 248.

CORTARINE, a liquid measure in Barcelona; i. 27.

CORZEC, a corn measure in Poland; i. 280; ii. 232.

COSS, a Bengal mile; i. 89.

COSSAH, a measure of capacity in Scindy, &c.; i. 99, 116.

COSSANG, a coin in Traugania; i. 121.

COTTAH, a land measure in Bengal; i. 89.

COTYLUS, an ancient Greek liquid measure; ii. 256.

COUNTERVAILING DUTIES, equal duties established between two countries, and charged on the importation and exportation of the same kind of goods.

COUPE, a corn measure in Geneva, Lyons, &c.; i. 153, 246; ii. 230.

COURANT, see *Currency*.

COURSE OF EXCHANGE; ii. 12, 15.

COURTAGE, brokerage.

COVADO, a cloth measure in Portugal; i. 213; ii. 240.

COVID, or COVIT, a long measure in the East Indies, China, Persia, and Arabia; i. 40, 68, 96; ii. 238.

COWSONG, a kind of nankeen used as money in the Philippine and Sunda Isles; i. 107, 118.

COWRIES, a sort of small shells used as money in some parts of the East Indies and Africa; i. 88, 115, 117, 166.

COYAN, a weight in Prince of Wales's Island, i. 114, 123.

COYANG, a measure for rice, &c. at Malacca, and in the East-India islands; i. 97, 108.

COZ, a small Persian copper coin; i. 151.

CRAKE, of window-glass, is a quantity of panes of glass packed into a wooden case, weighing about 10 stone.

CRAN, of herrings, 34 wine gallons.

CRANAGE, money paid for the use of a crane, by which bulky or heavy goods are lifted out of a ship, &c.; also money paid for weighing.

CRAVEEL, a measure for timber at Hamburg; i. 177.

CRAZIA, a small coin in Tuscany; i. 129, 199.

CREDIT, in commerce, a trust of money, or merchandise.

CREDIT side, in book-keeping, the right hand page or side of an account.

CREDITOR, a person to whom any sum of money is due.

CREEK, a place where officers are commonly stationed to prevent the running of goods, as they are not lawful places of importation or exportation without a particular licence or sufferance.

CREUTZER, CRUITZER, or KREUTZER, a small coin and money of account in many parts of Germany and Switzerland; i. 23, 27, 38, 68, 160, 261, 348, 369.

CRIMBAL, a small coin in the West India Isles; i. 361.

CRORE, 100 lacs, or 10,000,000 of Rupees; i. 88.

CROWN, a silver coin in England, and also in the Netherlands and in Denmark; i. 20, 75, 216. Assay and value; ii. 163, &c. Impressions; 182, 183, 195.

CROWN, French, see *Ecu*. Italian, see *Scudo*.

CROWN MONEY in Denmark; i. 74, 125.

CRUSADO, or CRUSADE, OLD, a money of account and an old gold coin in Portugal; i. 210. Assay and value; ii. 159. Impressions; 199.

CRUSADO, NEW, a coin in Portugal, both gold and silver; i. 210, 290. Assay and value; ii. 159, 165. Impressions; 199.

CUBA, a measure for honey, &c. in Abyssinia; i. 2; ii. 234.

CUBIC MEASURE, English; i. 224, 226.

CUBIC FEET of different countries compared to English; ii. 248.

CUBIT, a measure of length in England, East Indies, &c.; i. Introduction xv.; i. 89, 223; ii. 238, 255, 259.

CUERDA, a long measure of Spain; i. 322.

CULY, a land measure at Madras, &c.; i. 93.

CUPO, a corn measure in Bologna; i. 43.

CURRENCY, or CURRENT, the money in circulation, as distinguished from bank money in Hamburg, &c. In the West Indies *currency* is applied to the money in which their accounts are kept, as distinguished from *sterling*; and at some of the islands, as well as in North America, the paper in circulation is called currency. See Introduction; i. xxxiv; also, pages 353, 359.

CUSTOM, a tax or duty paid for goods exported or imported.

CUSTOM-HOUSE, the place where entries are made of the goods exported or imported, and where the duties are paid.

CUTCHA WEIGHT, in the East Indies; i. 116, 117, 119, 123.

CYATHUS, an ancient Greek land measure; ii. 256. Also, an ancient Roman corn measure; ii. 258.

D

DAALDER, a Dutch silver coin, and money of exchange; i. 8, 19. Assay and value; ii. 164. Impressions; 190.

DABOU, a weight at Masulipatam; i. 110.

DACTYLUS, an ancient Greek long measure; ii. 255.

DAEZAJIE, a silver coin of Persia; i. 277.

DAHAB, a money at Massuah, in Abyssinia; i. 1.

DAMAGES, on returned bills in America; i. 357. In the West Indies; i. 368.

DANIM, a money of account in Bassora; i. 29.

DAYS OF GRACE, a certain number of days allowed for the payment of a bill after the written term is expired; ii. 2.

DEBENTURE, a certificate given at the custom-house, when the exporter of goods conforms to the proper regulations, by which certificate he becomes entitled to receive a bounty or drawback.

DEBIT side, the left hand page or side of an account.

DEBT, a sum due from one person to another.

DEBTOR, a person who owes money to another.

DECAGRAMME, DECAMETRE, &c. 10 Grammes, Metres, &c.; i. 136, 137; ii. 251.

DECAPODOM, an ancient Greek long measure; ii. 255.

DECHER, in Germany signifies ten; i. 50, 164.

DECIARE, DECIMETRE, &c. the 10th part of an Are, Metre, &c. i. 136; ii. 251.

DECIME, a money of account and coin in the new system of France; i. 141.

DEDO, a long measure of Portugal and Spain; i. 213, 322.

DEGREE OF THE MERIDIAN; i. Introduction, xviii.

DEGREE CENTESIMAL, in the French system; i. 136.

DEGREE DECIMAL; i. 138.

DEL CREDERE, a charge made by merchants in selling goods, for guaranteeing the solidity of a merchant.

DEMAND, calling upon a man for any sum of money, or any other thing due. A bill is payable on demand when it is to be paid immediately on being presented.

DEMURRAGE, an allowance made to the master of a ship for being detained in port longer than the time agreed upon.

DENAR, a money of account in Breslau; i. 50.

DENARIUS, an old Roman weight and coin; ii. 258.

DENARO, a money of account and a weight in most parts of Italy; i. 18, 31, 41, 153, 293, 307, 339, 344, 346.

DENIER, a small weight and money of account in the old system of France, and in Switzerland; i. 28, 38, 141, 151, 153.

DENIER DE GROS, see *Groote*.

DENUSHKA, a copper coin of Russia; i. 299.

DEPOSIT, a sum advanced in part of payment, which sum is to be accounted for in the general balance; or a security to perform a duty, to be re-delivered when such duty is performed.

DERHAM, or DERIM, a weight in Persia, Abyssinia, Morocco, &c.; i. 2, 260, 278; ii. 223; also, an ancient weight in Egypt; ii. 260.

DESSETINA, a land measure in Russia; i. 302; ii. 249.

DEVIATION, a departure, without reasonable cause, from the regular course of a voyage insured, which deviation annuls the contract of insurance.

DEXTRE, an old land measure in France; i. 259.

DHAN, a gold and silver weight in Bengal; i. 88.

DICKER, or DACRE, of leather, 10 hides; of necklaces, 10 bundles, each bundle ten necklaces.

DIDRACHM, an ancient Greek weight; ii. 256.

DIEMT, an acre of land in East Friesland; i. 126.

DIET BOX; i. 219.

DIETHAUFE, a dry measure in Nuremberg; i. 271.

DIGITUS, an ancient Roman long measure; ii. 257.

DIME, a money of account and silver coin in America; i. 353. Assay and value; ii. 169.

DINAR, a money of account in Persia; i. 277.

DINERO, a money of account and also a weight in Spain; i. 5, 248, 253, 316, 319, 342.

DINHEIRO, a weight for silver in Portugal; i. 211.

DISCOUNT, an allowance of so much per cent. for prompt payment; i. Introduction, xxxiv.

DISH, a measure by which lead is sold; i. 220.

DISHONOUR, a term used when the acceptance or payment of bills of exchange, &c. is refused.

DISTRAIN, to seize goods for payment of a debt.

DITO, a long measure in some parts of Italy; i. 256.

DITTOBOLO, a copper coin in the Ionian Islands; i. 371.

DIWANI, a kind of money in Abyssinia; i. 1.

DIVIDEND, a share of any profit, debt, or capital; also the interest in the stocks; i. 240.

DOBRA, or DOBRAON, a Portuguese gold coin; i. 210. Assay and value; ii. 159. Impressions; 199.

DOCK, a place where ships are built, repaired, or laid up.

DOCKET, a short memorandum or summary affixed to larger papers, or a bill of direction tied to goods, showing the place where, and the person to whom, they are to be delivered. Striking a docket is when a creditor gives bond to the Lord Chancellor, proving his debtor to be a bankrupt.

DOCRA, a weight for pearls at Bombay; i. 95.

DOCUMENT, of a shipment means invoices, bills of lading, &c.

DOG, a small coin used in the West Indies; i. 362.

DOIT, or DUYT, a small Dutch copper coin, being the 8th part of a Stiver; i. 97; also a division of the English Grain Troy; i. 219.

DOLIS, a small weight of Russia; i. 299.

DOLIUM, an ancient Roman liquid measure; ii. 258.

DOLLAR, African; ii. 167. Impressions; 206.

DOLLAR, American; i. 353. Assay and value; ii. 169. Impressions; 213.

DOLLAR, Danish, Dutch, German, and Swedish, see *Rixdollar*.

DOLLAR, Italian, see *Pezza*.

DOLLAR, Spanish; i. 316, 371. Assay and value; ii. 160, 167. Impressions; 207.

DOLLAR of Plate, a Spanish money of account and exchange; i. 318.

DOLLAR, Turkish, see *Piastre*.

DOLLAR, West Indian; i. 360, &c.

DOODEE, a copper coin in Madras; i. 90.

DOOGANEY, a money of account in Bombay; i. 93.

DOPPIA, an Italian gold coin; i. 42, 157, 254, 293, 344. Assay and value; ii. 158, &c. Impressions; 187, 191, 193, 197, 202, 213.

DOPPIETTA, a gold coin of Sardinia; i. 308. Assay and value; ii. 160.

DOREEA, a base coin and money of account in Bombay; i. 93.

DOUBLA, a silver coin of Tunis; i. 338.

DOUBLE, see *Saime*.

DOUBLOON, or DOBLOON, a Spanish gold coin; i. 253, 319, 342, 371. Assay and value; ii. 160. Impressions; ii. 206.

DOUBLOON of Plate, a Spanish money of exchange; i. 317, 342; ii. 88.

DRACHM, or DRAM, a weight in England, France, Holland, and Prussia; i. 9, 34, 133, 220. Also an ancient Greek weight; ii. 256; still used in some parts of the Levant; i. 3, 4, 30, 58, 72, 276, 315.

DRAFT, a bill or check by which one person draws for money on another; ii. 10. Also an allowance in the weight of goods; i. 228.

DRAWBACK, a premium allowed by the custom-house on the re-exportation of goods.

DRAWEE, the person on whom a bill of exchange is drawn; ii. 2.

DRAUGHT, of a ship, the number of feet she sinks in the water.

DREYER, a money of Breslau; i. 51.

DREYLING, a small copper coin at Hamburg and Copenhagen; i. 75, 167.

DRIEMT, a land measure in Friesland; i. 126.

DRITTEL, a silver coin of Germany, see *Florin*.

DROMT, a dry measure in Lubec, Wismar, and Stettin; i. 242, 324, 369.

DROP, a weight in Scotland; i. 309.

DUBBEL, a division of the Florin in Batavia; i. 124.

DUBBELTJE, a Dutch coin; i. 9, 97.

DUBS, a copper coin of Seringapatam; i. 116.

DUCAT, Spanish, a money of account and of exchange; i. 265, 317, 342; ii. 88.

DUCAT, Danish; i. 75. Assay and value; ii. 157. Impressions; 181.

DUCAT, Dutch, a gold coin; i. 8, 20. Assay and value; ii. 158. Impressions; 190.

DUCAT, German; i. 2, 24, 161, 167, 348, 369. Assay and value; ii. 157, &c. Impressions; 177, &c.

DUCAT, Hungarian or Kremnitz; i. 192, 348. Assay and value; ii. 157. Impressions; 178.

DUCAT, Italian, both a gold and silver coin, and also a money of account; i. 31, 258, 263, 344; ii. 161, 165, &c. Impressions; 194, 214.

DUCAT, Polish; i. 279. Assay and value; ii. 159. Impressions; 198.

DUCAT, Prussian; i. 33. Assay and value; ii. 159. Impressions; 200.

DUCAT, Russian; i. 299. Assay and value; ii. 159. Impressions; 203.

DUCAT, Swedish; i. 328. Assay and value; ii. 160. Impressions; 208.

DUCAT, Swiss; i. 28, 38, 305, 374. Assay and value; ii. 157, &c. Impressions; 179, &c.

DUCATELLO, an Egyptian coin; i. 4.

DUCATONE, an Italian silver coin; i. 344. Assay and value; ii. 169. Impressions; 211.

DUCATOON, a Dutch silver coin; i. 8, 20. Assay and value; ii. 164. Impressions; 190, 195. It is also a silver coin at Liege; ii. 164.

DUDU, a copper coin in the East Indies; i. 113, 116.

DUE-PROTECTION, acceptance or payment of a draft or bill.

DUELLE, a weight used by Apothecaries in the old system of France; i. 133.

DUELLUM, an ancient Roman weight and measure; ii. 257, 258.

DUESKEN, a weight used in assaying in Holland.

DUMAREE, a money on the Malabar coast; i. 115.

DUTGEN, a money of account in Bremen and Dantzic; i. 48, 82.

DUTZEN, 12 in German.

DUTY, a general term for a tax or impost.

DUYT, a copper coin of Holland.

E

EAGLE, an American gold coin; i. 354. Assay and value; ii. 161. Impressions; 213.

EBRŒER, a Danish silver coin; i. 75.

EARNEST, money advanced to bind parties to the performance of a verbal agreement.

ECU, a silver coin in the old system of France, and in some parts of Switzerland; i. 27, 38, 152, 326, 374. Assay and value; ii. 162, &c. Impressions; 179, &c. It is also a silver coin at Hesse Cassel; ii. 164.

EFFECTIVE MONEY of Spain; i. 323; ii. 90. Of Portugal; ii. 72.

EGGEBA, a weight in Guinea; i. 167.

EIMER, a measure for wine in many parts of Germany, Prussia, and Switzerland; i. 35, 83, 171, 206, 262, 271, 283, 324, 350, 375; ii. 234, &c.

ELL, a measure for cloth in England, Holland, and Germany; i. 10, 35, 223, 309; ii. 238.

EMBARGO, the stopping of ships for a time, by order of government.

EMBEZZLEMENT is when a person appropriates, by breach of trust, or turns to his own use, what is committed to his care.

EMINE, a dry measure in the old French system; i. 259.

EMPORIUM, a principal place for the importation and sale of merchandise; also called a *mart* or a *staple*.

ENDASSE, the short Ell in Turkey; i. 73; ii. 239.

ENDORSEMENT, see *Indorsement*.

ENFRANCHISE, to make free, or incorporate a person into a society.

ENGEL, a weight in Holland; i. 9, 267.

ENTREPOT, a public magazine appointed in foreign countries for the reception of merchandise imported.

ENTRY, a statement of goods imported or exported as entered in the books of the custom-house.

EPHAH, an ancient Jewish measure of capacity; ii. 259.

ESCA, a land measure at Bourdeaux; i. 47.

ESCALIN, a base silver coin in the Netherlands; i. 20. Also a money of account in Basil; i. 28; and a silver coin of Liege; i. 209. Assay and value; ii. 164. Impressions; 191. It is likewise the name given to the Bit in the French West India Isles; i. 364.

ESCANDAGLIO, a sample of the measure of corn lading on board of a ship, and which measure is delivered to the captain in a sealed bag, to be given to the consignees of the cargo to ascertain deficiency and prevent dispute.

ESCANDAL, a liquid measure at Marseilles; i. 252.

ESCHEN, a division of the gold and silver weight in Cologne and Hamburgh; i. 71, 170.

ESCUDO, a money of account at Bilboa; i. 41. Also a gold coin of Portugal and Spain; i. 210, 319.

ESTADAL, a long measure in Spain; i. 322.

ESTADIO, a long measure of Spain and Portugal; i. 213, 321.

ESTERLIN, see *Engel*.

ESTLIN, a French weight in the old system; i. 133.

EXCAMBIUM, an exchange, or place where merchants meet daily to transact business.

EXCHANGES, defined; i. Introduction, xxxv; ii. 1. Arbitration of exchange; ii. 107 to 126. Bills of exchange, ii. 1. Charges on exchange operations; ii. 126. Circulations of exchange; ii. 138. Course of exchange, ii. 15; Foreign exchange; ii. 12. Inland exchange; ii. 11. Exchange laws of England; ii. 3. Of France; i. 143. Of Hamburg; i. 178. Monies of exchange, and exchange calculations, ii. 18 to 103.

EXCHEQUER, the public office and court to which all revenues belonging to the crown are brought.

EXCHEQUER BILLS, see *Bills*.

EXCISE, an inland tax levied upon various commodities.

EXPORTATION, the act of sending goods from one country to another.

F

FACTOR, a merchant's agent or correspondent in some distant part.

FACTORAGE, the allowance, commission, or salary given by a merchant to his agent.

FACTORY, a commercial establishment in a foreign country, where factors, merchants, and traders carry on business with the natives of the place.

FAGGOT, of steel, 120 lb.; of wood, 3 feet long, 24 inches round.

FAILURE, see *Bankruptcy*.

FAIR, a greater kind of market, held at a stated time and place, where traders from different parts of the country, and sometimes from foreign countries, resort for the purpose of traffic.

FALL, a long measure in Scotland; i. 309.

FANAM, a small coin in the East Indies, both of gold and silver; i. 90, 98, 102. Assay and value; ii. 170. Impressions; 219.

FANEGA, a corn measure in Spain; i. 23, 150, 322; ii. 229.

FANEGADA, a land measure in Spain; i. 61, 323, 343; ii. 249.

FANGA, a measure of capacity in Portugal; i. 212.

FANOE, see *Fanam*.

FARCEL, or FARZIL, see *Frazil*.

FARDEL, a term used in reckoning in Germany; i. 164.

FARTHING, the smallest copper coin in Great Britain; i. Introduction, xxix. and page 216.

FARUKI, a gold coin in the East Indies; ii. 161. Impressions; 217.

FASS, a corn measure in Germany; i. 3, 71, 171; ii. 229. Also, a liquid measure in Bern, Berlin, and some parts of Germany and Denmark; i. 35, 39, 77, 206, 277, 281, 373.

FATHOM, a long measure in most countries, of six feet; i. Introduction, xv. page 223, &c.; ii. 259.

FAUX, a land measure in Switzerland; ii. 249.

FEDERAL MONEY, of America; i. 353.

FEHRT, a corn measure in Stralsund; i. 326.

FELIN, an old French weight; i. 133.

FELLOWSHIP, in commerce, is when two or more join their stock and trade together, dividing their gain or loss proportionably.

FENIM, a money of account in Switzerland; i. 28.

FERDING, a money of account at Libau and Riga; i. 207, 288.

FERLINO, a division of the commercial pound in Bologna, &c.; i. 42.

FERRADO, a corn measure in Galicia, a province of Spain; i. 150; ii. 230.

FETTMANGEN, a money of account in Cleves; i. 68.

FIASCO, a liquid measure in Italy; i. 131.

FILIPPO, or PHILIP, a silver coin of Milan and Modena; i. 254, 258.

FINANCES, a term generally applied to public revenues.

FIRLOT, a Scotch measure for corn; i. 310; ii. 232.

FIRKIN, a measure of capacity in England; i. 223, 227; of butter, 56lb.; of soap, 64lb. Also, a measure by which Irish provisions are sold; i. 194.

FIRM, the title or signature of a mercantile house, or company.

FISCA, a silver coin in the Canary Isles; i. 61.

FIXED NUMBER, a constant factor used in exchange calculations; ii. Introduction, ix.; 129.

FLINDERKE, a money of account in Embden; i. 125.

FLINRICH, a money of account in Bremen; i. 48.

FLOOSE, or FLOUCHE, a money of account in Bassora; i. 29.

FLORIN, called also *Guilder* or *Gulden*, a silver coin and money of account in Holland, Germany, and Switzerland; i. Introduction, xxx. 8, 38, 44, 160, 267, 348; ii. 149. Assay and value; ii. 162, &c. Impressions; 190, &c.

FLORIN, GOLD, a coin of Hanover, and other parts of Germany; i. Introduction, xxx. 190. Assay and value ii. 158. Impressions; 188.

FLUCE, a money of account in Barbary; i. 260.

FODDER, of lead, varies in different counties; i. 220.

FOGLIETTA, a liquid measure in Italy; i. 18, 43, 294.

FONDUCLI, a Turkish gold coin, see *Sequin*.

FOOT, a long measure in England and most other countries, taken originally from the human foot, and varying more or less in different places; i. Introduction, xv.; also pages 223, 226; ii. 244, 255.

FORESTALLING, is the buying of goods before they come to market, with a design to raise the price.

FORFARO, a weight in Egypt; i. 4.

FORLI, an Egyptian copper coin; i. 4.

FORTIN, a measure of capacity in Constantinople; i. 73.

FOTMAL, of lead, 70lb.

FOUANG, a silver coin in Siam; i. 117.

FRAIL, of raisins, about 75lb.

FRANC, a money of account and silver coin in the new system of France; i. 141; ii. 150. Assay and value; ii. 163. Impressions; 185.

FRANCESCONE, a silver coin in Tuscany; i. 129, 200. Assay and value; ii. 169. Impressions; 212.

FRANKEN, a money of account in Switzerland; i. 27, 38, 334.

FRASCO, a wine measure in the Brazils; i. 48.

FRAZIL, a weight in Arabia; i. 40, 257.

FREDERICK, or FREDERICK D'OR, a gold coin in Prussia and Germany; i. 34, 161, 296. Assay and value; ii. 159. Impressions; 200.

FREIGHT, the goods which a ship carries; also the money paid for carrying them.

FUDDEA, a money of account in Bombay; i. 93.

FUDER, a large measure for wine in Germany, Prussia, Denmark, and Sweden; i. 25, 35, 50, 77, 171, 271, 331, 350.

FUDERMASSEL, a corn measure at Vienna; i. 350.

FUND, a stock or capital; that by which any expense is supported.

FUNDS, PUBLIC, or STOCKS; i. 239.

FUNDS, French; i. 146.

FUORI BANCO, out of bank; the current money of Genoa; i. 155.

FURDINGAR, a liquid measure in Finland; i. 332.

FURLONG, a long measure in England; i. 223, 226, 309.

FYRKE, a money of account and copper coin in Denmark; i. 74.

G

GABARAGE, wrappers in which Irish goods are packed up.

GABEL, an old word for a tribute or custom paid to the prince or lord.

GALL, a small piece of silver with characters on one side only, used as coin in Cambodia; i. 103.

GALLEON, a sort of ship, employed by the Spaniards in the West-India trade; and also to bring gold and silver from America to Europe, &c.

GALLON, a measure of capacity in England; i. 194, 221, 222, 227, 228, 310; ii. 235.

GANDANG, 25 pieces of cloth which pass as money in the Philippine Islands; i. 107.

GANTAM, or GANTANG, a measure for rice in some parts of the East Indies; i. 107, 108, 118, 197.

GANZA, a small coin in some parts of India beyond the Ganges; i. 113.

GARBLE, the dust, dross, and refuse of spices and drugs.

GARBLING, picking out the worst of any commodity.

GARCE, a measure for grain, and also a weight at Madras, Pondicherry, and other places in the East Indies; i. 92, 93, 105.

GARI, of Rupees, in the East Indies, about 4000.

GARNET, a corn measure of Russia; i. 301.

GARNIEC, a measure of capacity in Poland; i. 280; ii. 236.

GASSA, a money of account in Persia; i. 151.

GAVADA, a land measure in the Mysore; i. 117.

GAUGER, a person appoint to gange or ascertain the contents of any excisable commodity.

GE, or JE, a long measure in some parts of the East Indies, eqnal to about 34½ Dutch ells, or 26 English yards.

GEBRAUDE, a liquid measure at Berlin; i. 35.

GEIRA, a land measure in Portugal; i. 213; ii. 249.

GENEVOISE, a silver coin of Geneva; ii. 163.

GENOVINA, a gold coin of Genoa; i. 157. Assay and value; ii. 158. Impressions; 187.

GEORGE D'OR, a gold coin of Hanover; i. 189. Assay and value; ii. 158. Impressions; 188.

GERRA, or JAR, a liquid measure in Minorca; i. 257; ii. 236.

GESCHEIDE, a corn measnre in Franckfort and Mentz; i. 148.

GHERIA, a long measure of Bengal; i. 89.

GHURRY, a division of time in the East Indies; i. 87.

GIGLIATO, the Sequin of Tuscany; i. 129; ii. 161, 211.

GILDER, see *Florin*.

GILL, a liquid measure in Great Britain; i. 222, 310.

GIORGINO, a silver coin of Genoa; i. 157.

GIRO, the name given to the money of exchange at Augsburg, Bolsano, and other places in Germany; i. 24, 44.

GIULIO, a small coin of base silver in Italy; i. 127, 292.

GIUSTINA, a silver coin in Venice; i. 344. Assay and value; ii. 169. Impressions, 214.

GOAD, or GODE, a kind of ell, 27½ inches long, by which Welsh frieze is measured in England.

GOBLET, a dry measure in Basil; i. 28.

GOELACK, a weight in Java; i. 100, 113.

GOESGEN, a money of account at Brunswick and Hanover; i. 53, 189.

GOLD GULDEN, or GOLD GILDER, see *Florin, Gold*.

GOLD MONEY, a money of account at Leghorn; i. 204.

GOLD VALUE, a kind of money used in Hanover; i. 189.

GOLD and SILVER, amount of, brought annually into circulation from all parts of the world; i. note, 254. Relative value of Gold and Silver; i. Introduction, xxvii.; ii. 147. Comparative value of Gold and Silver; i. Introduction, xxxi.

GOMBETTA, a corn measure in Genoa; i. 159.

GOMOR, an ancient Jewish measure of capacity; ii. 259.

GONZE, a small weight for gold and silver at Bombay; i. 94.

GOOD GROSCHE, or GUT GROSCHE, a small coin and money of account in Prussia; and also in Hanover, and other parts of Germany; i. 33, 162, 189.

GOOROOSH, the name given to the Piastre by the Turks.

GOULD, see *Florin*.

GOURDE, the name given to the Spanish Dollar in the French and Dutch West-India Islands ; i. 364.

GRACE, see *Days of grace.*

GRACHAL, an ancient Jewish measure of capacity ; ii. 259.

GRADUS, an ancient Roman itinerary measure ; ii. 257.

GRAIN, a small division of the Pound Troy, and also a weight in most parts of the world ; i. 219.

GRAMME, the unit for weights in the new French system ; i. Introduction, xix ; 135, 137 ; ii. 251.

GRANO, a money of account in Naples, Sicily, and Malta ; i. 249, 263, 313. It is also the Italian name for a *Grain* in weight.

GRANOTINO, a small weight in Italy ; i. 340.

GRIEVEN, a small Russian silver coin ; i. 299.

GRIMELLINO, a money of account in Tripoli ; i. 337.

GRISCIO, an Egyptian coin ; i. 4.

GROAT, an old English silver coin ; i. Introduction, xxix. also, page 216.

GROS, a silver coin in some parts of Germany ; ii. 164. Also a money of account in Switzerland ; i. 28.

GROS, a weight in France, Switzerland, and Prussia ; i. 34, 133, 153, 252 ; ii. 252.

GROSCHE, a small coin and money of account in Germany, Prussia, Poland, and Russia ; i. 33, 161, 192, 278, 299.

GROSCHEL, a money of account in some parts of Germany ; i. 51, 280, 348. Also a base coin in Hungary ; i. 192.

GROSS, 12 dozen.

GROSS WEIGHT, the whole weight of goods before the allowances are deducted.

GROSSETTO, a money of account at Venice ; i. 344.

GROSSO, a money of account in the Venetian states ; i. 31, 274, 344. Also a silver coin of Rome ; ii. 166 ; and a weight at Venice ; i. 346.

GROTE, or GROOT, a money of exchange in Flanders, Holland, and Hamburg, called also *Penny Flemish ;* i. 7, 8, 125, 167, 272.

GROTE is also a small coin and money of account at Bremen ; i. 48.

GROUND, a land measure at Madras, see *Mauney.*

GROUNDAGE, a small duty payable in certain parts by ships coming to anchor.

GRUESO, a money of account in some parts of Spain ; i. 265.

GUDDA, a liquid measure in Arabia ; i. 40, 258.

GUERZE, or GUZ, a long measure in Persia, Arabia, and some parts of the East Indies ; i. 30, 40, 89, 258, 278 ; ii. 238.

GUILD, a company or society of men incorporated.

GUILDER, see *Florin.* GUILDER of the Dutch West-India Isles ; i. 366.

GUINEA, an English gold coin ; i. Introduction, xxx. ; also pages 216, 218. Assay and value ; ii. 157 ; Impressions ; 182.

GUJAH, a long measure in the Mysore ; i. 117.

GULDEN, see *Florin.*

GUNCHA, a weight in Acheen; i. 97, 122.

GUNDA, a money of account in Bengal; i. 88.

GURSAY, see *Garce.*

GUZ, see *Guerze.*

H

HACKEN, a land measure in Prussia; i. 35, 83.

HALAGE, money paid for haling, drawing, or carrying, goods to and from ships.

HALEBI, the long Ell of Turkey; i. 73; ii. 239.

HALLAGE, toll or duty paid for goods vended in a hall.

HAND, a long measure in England, i. 223.

HANDSEL, i. e. *Handsale,* money received on the first sale of any part or parcel of goods.

HANSE TOWNS, certain free commercial towns in Germany and Poland, which formerly joined in a league for mutual defence, by which they enjoyed certain privileges. The chief are Hamburg, Lubec, and Dantzic.

HARDARY, a land measure in the Mysore; i. 117.

HARF, the same as *Dahab,* a money in Massuah; i. 1.

HARRAFF, an imaginary money at Betelfagui and Mocha; i. 40, 257.

HARSELA, see *Oke.*

HASER DENARIE, a silver coin of Persia; i. 277.

HAUT, or CUBIT, a long measure in the East Indies; i. 89.

HECTARE, HECTOGRAMME, HECTOLITRE, HECTOMETRE, &c. in the new French system of weights and measures, 100 ares, grammes, &c.; i. 136, 137; ii. 249, 251.

HECTOS, an ancient Greek land measure; ii. 255.

HELFGEN, a liquid measure at Osnaburg; i. 274.

HELLER, a money of account in some parts of Germany and Switzerland; i. 2, 63, 68, 70, 285, 374. Also a weight in Germany and Prussia; i. 34, 163, 348.

HEMIHECTOS, an ancient Greek measure both for land and corn; ii. 255.

HEMINA, an ancient Roman corn measure; ii. 253.

HEREDIUM, an ancient Roman land measure; ii. 257.

HEXAPODON, an ancient Greek land measure; ii. 255.

HIDE, of land, 100 acres.

HIMTEN, a corn measure in Hamburgh, and other parts of Germany; i. 54, 64, 171, 190, 245; ii. 230, &c.

HIN, an ancient Jewish liquid measure; ii. 259.

HOED, a corn measure in some parts of Holland and Flanders; i. 16, 297; ii. 229.

HOGSHEAD, a liquid measure in England; i. 222, 227, 310.

HOMER, an ancient Jewish measure of capacity; ii. 259.

HOMMÉ DE VIGNES, an old measure for land in France; i. 246.

HUBE, a land measure in Prussia; i. 83.

HUBLA, a small weight at Scindy; i. 115.

HUCKSTER, one who sells provisions by retail.

HUFE, a land measure in Prussia; i. 35.

HUNA, a money of account at Mangalore; i. 109.

HUNDRED WEIGHT, a weight in the British islands and colonies; i. 220.

HUSBANDAGE, the commission or allowance given to the managing owner of a ship, who is commonly called the Ship's Husband.

I

ICKMAGOG, a measure for rice in Japan; i. 197.

IMBUTO, a corn measure in Sardinia; i. 308.

IMMI, a corn measure in some parts of Switzerland and Germany; i. 39, 352, 369, 375; ii. 233.

IMPERIAL, a Russian gold coin; i. 299. Assay and value; ii. 160. Impressions; 204.

IMPORTATION, the act of bringing goods into a country from foreign parts.

IMPOST, a duty on goods imported.

INC, a long measure in Japan; i. 197.

INCH, a long measure in England; i. 223, 226.

INDEMNITY, is when a person secures another from responsibility against any particular event.

INDORSEMENT, of a bill; ii. 2, 4.

INGOT, an unwrought mass of gold or silver.

INGRAIN, an additional allowance in the sale of coals; i. 222.

INGROSSING, buying up large quantities of corn or other provisions, with a view to raise their price, and to sell them again.

INSOLVENT, a person not possessed of a capital adequate to the payment of his debts.

INSTALMENTS, payments of a sum of money in certain proportions and at stipulated times.

INSURANCE, a contract of indemnity, by which one party engages, for a stipulated sum, to insure another party against a risk to which he is exposed. The party who takes upon him the risk is called the *Insurer, Assurer,* or *Underwriter;* and the party protected by the insurance is called the *Insured,* or *Assured;* the sum paid is called the *Premium;* and the paper or parchment containing the contract is called the *Policy.*

INTEREST; i. Introduction, xxxiv.

INTRINSIC PAR; ii. 13.

INVENTORY, a schedule, account, or catalogue of effects.

INVOICE, a paper sent with goods exported, containing the name of the ship, place of destination, and person to whom the consignment is made, the quantity and amount of the goods, the shipping charges, the cost of insurance, and the commission to the agent or factor. Invoices are generally copied into a book, called the *Invoice Book*. There is sometimes the Invoice Book *outward*, containing copies of all Invoices sent off; and the Invoice Book *inward*, for copies of Invoices received from abroad.

ITCHEBO, or ITJIB, a gold coin of Japan; i. 196.

J

JACKTAN, a measure for cloth on the coast of Guinea; i. 167; ii. 240.

JACOBUS, an old English gold coin, struck under James I. worth about 25 shillings.

JAR, a liquid measure in Minorca and the Ionian States; i. 257, 371.

JEES, a liquid measure of Augsburg; i. 25.

JERQUING, of a ship, is a search performed by an officer of the customs, (called a Jerquer,) after she is unloaded, to see if there are no unentered goods concealed.

JETTA, or SETTLE, a money on the Malabar coast; i. 103.

JETTISON, the act of throwing goods overboard for the preservation of other property, for which the owner is to be reimbursed according to the nature of the concern.

JOAB, a long measure in Bengal; i. 89.

JOANESE, or JOE, a Portuguese gold coin; i. 210. Assay and value; ii. 159. Impressions; 199.

JOCH, a land measure at Vienna, and other parts of Germany; i. 350; ii. 249.

JOURNAL, a land measure in some parts of France, as at Bourdeaux, St. Maloes, &c.; i. 47; ii. 307.

JOURNAL, in book-keeping, a book in which the daily transactions of a merchant or trader are recorded, distinguishing the debtors and creditors of the different accounts, in order to transfer them afterwards with greater ease to the Ledger.

JOURNAL, in navigation, a record of the voyage.

JOW, a measure of length in the East Indies; i. 89.

JUCHART, a land measure in some parts of Germany and Switzerland; i. 29, 39; ii. 249.

JUCK, or JUX, in Turkey, 100,000 Aspers; i. 72.

JUGERUM, an ancient Greek and Roman land measure; ii. 255, 257.

JUMBA, a land measure in the Prince of Wales's Island; i. 114.

JUNGFRUR and JUNKFRA, a dry and liquid measure in Sweden; i. 331.

JUTTE, a measure for salt in the old system of France; i. 307.

K

KABAN, a weight in the Molucca Isles; i. 120, 123.

KANGAN, a piece of coarse cloth that passes as money in the Philippine and Sunda Isles; i. 107, 118.

KANNA, a dry and liquid measure in Sweden; i. 331; ii. 232, 237.

KANNE, a measure of capacity in Germany; i. 3, 171, 206. Also, a Dutch and Danish liquid measure; i. 77, 98, 297.

KAPP, a corn measure in Sweden; i. 331.

KARCH, in Germany, 400lb.

KASBEQUIS, a money of account and copper coin in Persia; i. 277.

KAST, in Sweden, 4 pieces; i. 332.

KAYSERGROSCHE, a money of account and base silver coin in Bohemia, and some parts of Germany; i. 23, 50, 161, 261, 281.

KEEL, a coal measure in England; i. 222.

KEG, a vessel for sturgeon, salmon, or other pickled fish, containing 4 or 5 gallons.

KELLA, a dry measure in Arabia; i. 40, 258.

KEN, a long measure at Siam; i. 118.

KENTILLAGE, see *Ballast.*

KEPPING, a money in Sumatra; i. 120.

KERAMION, an ancient Greek liquid measure; ii. 256.

KEY, KAY, or QUAY, a lawful wharf for the landing of goods.

KEYAGE, or WHARFAGE, a toll paid for loading or unloading goods at a key or wharf.

KHAHOON, a measure of capacity in Bengal; i. 89.

KHANCHAA, a weight in the East Indies; i. 89.

KIBEAR, a money of Abyssinia; i. 1.

KILARE, 1000 ares in the new French system; i. 136.

KILDERKIN, half a barrel, a measure for liquids and dry goods; i. 223, 227.

KILLOW, or KISLO, a Turkish corn measure; i. 73, 307, 315; ii. 230.

KILOGRAMME, KILOLITRE, KILOMETRE, 1000 grammes, litres, &c. in the new French system of weights and measures; i. 136, &c. ii. 222, 225, 250, 251.

KIMPFE, a corn measure in Mentz; i. 148.

KINTAL, see *Quintal.*

KIP, a weight at Malacca; i. 108.

KISLOZ, a corn measure of Egypt; i. 4.

KODAMA, a globular piece of silver that passes as money in Japan; i. 197.

KOMPOW, a kind of Chinese linen used as currency in the Philippine Isles; i. 107.

KOONKE, a measure of capacity in Bengal; i. 89.

KOPFE, a corn measure in Germany and Switzerland; i. 3, 286, 350, 375.

KOPFSTUCK, see *Copstick*.

KOPY, a money of account of Bohemia; i. 280.

KORZEC, or CORZEC, a corn measure in Poland; i. 280; ii. 232.

KREMNITZ DUCAT; i. 281. Assay and Value; ii. 157. Impressions; 178.

KREUTZER, see *Creutzer*.

KROBA, a measure for corn in Morocco; i. 260.

KRUESEN, a measure for corn in Embden; i. 126.

KRUG, a measure of capacity in Norway; i. 32.

KRUMSTERK, a coin in Embden; i. 126.

KRUSKA, a liquid measure in Russia; i. 301.

KULACK, a measure of capacity in Batavia; i. 101.

KULLMIT, a corn measure of Pernau and Riga; i. 277.

KUPE, a liquid measure in Prussia; i. 35.

KUPFLEIN, a corn measure in Basil; i. 28.

L

LAC, of Rupees, in the East Indies, 100,000; i. 88.

LACKSAS, a weight in the Sunda Isles; i. 118.

LADING, BILL OF, see *Bill*.

LAEP, a commercial weight in Breslau; i. 52.

LAND FASS, a liquid measure in Bern; i. 39.

LAND MUNTZE, a money of account in Bavaria; i. 261, 285.

LAND SURVEYOR, a person employed in measuring land; also, an Inspector of customs, &c.

LAND WAITER, or SEARCHER, a custom-house officer, whose duty it is to take an account of goods imported.

LAPPE, see *Coppa*.

LARIN, an old coin and money of account in Persia and Arabia; i. 277. Assay and value; ii. 170. Impressions; 219.

LAST, a measure for corn and various other articles in England, Holland, and Germany; i. 10, 32, 35, 50, 71, 83, 220, 228, 273, 297, 324.

LAST, a term used in valuing and determining the burden of ships; i. 83, 110, 164, 224.

LASTAGE, the ballast or lading of ships; the word is sometimes used for garbage, rubbish, &c.; also a duty on wares rated by the Last.

LAXSAN, a money of account in some parts of Java; i. 100.

LEA, a word used in some parts of England to express a certain quantity of thread or worsted.

LEAGUE, or LIEUE, an itinerary measure in France and other parts of Europe; ii. 250.

LEAGUE, MARINE, three geographical miles of 60 to a degree; i. 224; ii. 250.

LEAKAGE, an allowance made at the custom-house for waste or loss of liquors.

LEAGER, a liquid measure at Batavia, the Cape of Good Hope, &c.; i. 63.

LEDGER, in book-keeping, the principal and most important book, in which the scattered articles or transactions of the journal or day-book are collected, disposed into a regular shape, and placed under their respective heads, on opposite pages of the same folio; the left page being the debtor side, and the right page the creditor side of the account. In different languages it is called the *head book*, the *great book*, the *master book*, &c.

LEGAL MONEY, of Portugal; ii. 72.

LEGGER, a liquid measure in Holland, i. 10.

LEGOA, Spanish and Portuguese for *League;* i. 213, 322.

LEOPOLDONE, a silver coin of Tuscany; ii. 169. Impressions; 212.

LETEEH, an ancient Jewish measure of capacity; ii. 259.

LETTER OF ADVICE, a letter giving notice of any transaction.

LETTER OF ATTORNEY, or POWER OF ATTORNEY, a writing which empowers one person to act for another.

LETTER OF CREDIT, a letter by which one person can receive money on the credit of another.

LETTER PATENT, a privilege granted to an inventor, to enable him exclusively to enjoy the advantages of his invention for a certain term of years.

LETTER OF MARQUE, a commission to captains of private ships, in time of war, to make reprisals on the ships of the enemy; the name is also applied to the ship bearing such commission.

LI, an itinerary measure in China; i. 68; ii. 250.

LIARD, an old French copper coin; also a money of account in Liege; i. 209.

LIBRA, a money of account in some parts of Spain; i. 5, 22, 316, 342; ii. 149.

LIBRA, is also the Latin, Spanish, and Italian name for a pound in weight; ii. 222, &c.

LIBRA ITALIANA; i. 256, 346.

LIBRA JAQUESA, a money of account in Arragon; i. 22; ii. 149.

LICENCE, a privilege from government for carrying on a trade or business, on which a certain duty is laid.

LIEU, a claim or attachment on any property, which a person has in his possession, for a debt due to him from the owner of the property.

LIEUE, see *League*.

LIFE ANNUITIES, annual payments to continue during one or several lives.

Light Money, a term applied in Hamburgh to several foreign coins, to which a nominal value is given; i. 168.

Lighterage, money paid for carrying goods to and from a ship in a boat or lighter.

Ligne, see *Line*.

Ligula, an ancient Roman corn measure; ii. 258.

Line, a division of the inch, used in France and other parts of the Continent; i. 39, 134, 223; ii. 252.

Lippie, a corn measure in Scotland; i. 310.

Liquidation, the concluding or winding up of a business, such as paying or receiving debts, &c.

Lira, a money of account in Italy; i. 129, 153, 335, 339, 344; ii. 150. It is also a silver coin, particularly at Milan and Venice; i. 255, 345. Assay and value; ii. 165. Impressions; 194, 212, 215.

Lira Imperiale, a money of account at Milan; i. 254; ii. 151.

Lira Italiana, the monetary unit in the decimal system lately introduced into Italy; i. 251, 254, 258, 275, 339, 344.

Lirazza, a base coin of Venice; i. 344; ii. 169. Impressions; 214.

Lisbonnine, an old gold coin of Portugal; i. 210.

Lispond, or Lispfund, a weight in different parts of Germany and Norway; i. 32, 34, 49, &c.

Liter, the Rottolo, or Pound of Abyssinia; i. 2.

Litra, an ancient weight in Egypt; ii. 260.

Litre, the unit for measures of capacity in the new French system; i. 135, 136; ii. 251.

Litron, a measure for corn and dry commodities in the old system of France; i. 133.

Livonina, an old Russian coin; i. 287, 289.

Livornina, an old silver coin of Leghorn; ii. 169. Impressions; 212.

Livre, the French name for a pound weight; i. 133; ii. 224, 252.

Livre, a money of account in the old system of France, and also in some parts of Switzerland; i. 27, 38, 141, 152; ii. 150. Accounts are likewise kept in several parts of Canada in Livres; i. 59.

Livre Colonial, the money of account in the Isle of France; i. 110.

Livre Foible, an old money of account in Switzerland; i. 269; ii. 151.

Livre Italian, see *Lira Italiana*.

Livre Tournois, see *Tournois*.

Livre Usuelle; i. 139; ii. 225.

Llivra, a liquid measure in Majorca; i. 248.

Load, a weight and also a measure of various dimensions for coarse articles; i. 49, 220, 222, 224.

Loans, Government, i. 239.

Lod, see *Loth*.

Lodra, an imaginary weight used in Turkey; i. 315.

Lof, a dry measure in Libau, Reval, &c.; i. 208, 287; ii. 231.

Log, an ancient Jewish liquid measure; ii. 259; also an abbreviation for *Logarithms*.

LOMBARD, a bank for lending money on pawn, so called from the Lombards, a people of Italy, who, in former times, followed this trade in different parts of Europe.

LOOF, or LOOP, a corn measure in Holland, and at Riga and Pernau; i. 276, 289; ii. 231.

LOOT, a weight in Holland; i. 9, 21.

LOT, a liquid measure in French Flanders; i. 85; ii. 235.

LOTH, a weight in most parts of the continent; i. 32, 38, 76, 82, 163, 301, 328, 375.

LOUIS, or LOUIS D'OR, a gold coin of France; i. 141. Assay and value; ii. 158. Impressions; 184.

LOUIS D'OR, a gold coin of Malta; i. 249. Assay and value; ii. 158. Impressions; 192.

LOUIS BLANC, an old French silver coin.

LOWENDOLLAR, or LYONDOLLAR, a Dutch silver coin; ii. 154.

LOXA, a dry measure in Sumatra; i. 97.

LUBS, or LUBISH, a term applied to the money of Lubeck and Hamburgh, as *Sterling* is to English money; i. 167, 241.

LUNGA, see *Moneta Buona*.

LUG, or LUGG, a kind of perch or pole of various dimensions.

LYANG, a money of account, and also a weight in China; i. 68.

M

MAAS, a measure for rice in Malacca; i. 108.

MAASS, or MASS, a measure of capacity in different parts of Germany and Switzerland; i. 25, 35, 39, 148, 262, 271, 286, 350, 375; ii. 232, 234.

MAAT, a corn measure in Holland; i. 297.

MACE, a money of account in China; i. 66. Also a small gold coin in Sumatra; i. 97.

MACUTA, a money of account on the coast of Africa; i. 166. Assay and value; ii. 167. Impressions; 200, 207.

MADEGA, a small measure for grain in Egypt, &c.; i. 2.

MADONNINA, a silver coin of Genoa; i. 157. Assay and value; ii. 163. Impressions; 187.

MAESGEN, a corn measure in Cassel; i. 64.

MAESSEL, a corn measure in Germany; i. 25, 261.

MAHBUB, a Turkish gold coin, see *Sequin*.

MAILLE, a small French weight in the old system; i. 133.

MAKCHEN, a corn measure in Francfort; i. 148.

MALABORONG, a weight in Borneo; i. 100.

MALDER, a corn measure in Holland; i. 229.

MALLA, a money of account in Barcelona; i. 26.

MALTER, a corn measure in various parts of Germany, Prussia, and Switzerland; i. 3, 35, 69, 83, 271, 375; ii. 230.

MAMOODI, or MAMOUDI, a money of account and silver coin of Persia and Arabia; i. 29, 151, 277.

MANA, see *Maund*.

MANDEL, in Germany, 15 pieces, or articles of any goods; i. 52, 164.

MANDELWEIGHT, a weight used for Ducats at Vienna; i. 350.

MANEH, an ancient Jewish weight; ii. 259.

MANGELIN, a weight used in the East Indies for pearls; i. 92.

MANIFEST, a paper containing the particulars of a ship and cargo, which paper must be signed by the master of the vessel, before any goods can be landed.

MANOGOGA, a measure for rice in Japan; i. 197.

MANUFACTURE, a commodity produced by labour or machinery from raw materials.

MARADOE, a coin in Tonquin; i. 102.

MARAVEDI, a Spanish money of account; i. 316.

MARCAL, a corn measure at Madras and Ceylon; i. 93, 105.

MARCHETTO, a copper coin and money of account in some parts of Italy; i. 31.

MARENGO, a gold coin of Piedmont; ii. 159. Impressions; 198.

MARIEN GROSCHE, a small money of account in some parts of Germany; i. 53, 161, 189, 245.

MARIEN GULDEN, a money of account at Brunswick; i. 53.

MARK, MARC, or MARCO, a weight in most parts of the continent, used chiefly for gold and silver; ii. 222. It is likewise an old English weight and gold coin; i. Introduction, xxx.; also page 216.

MARK, a money of account in some parts of Germany, and also in Denmark and Norway; i. 2, 6, 32, 74, 167, 241; ii. 151.

MARK, a silver coin of Hamburg, &c.; i. 168. Assay and value; ii. 163. Impressions; 191. It is likewise a silver coin in Denmark; i. 74. Assay and value; ii. 163.

MARK FERDING, MARK RIGISH, two monies of account at Riga; i. 288.

MARQUÉ, a copper coin in the Mauritius; i. 110.

MART, a great market, fair, or other place of public traffic.

MAS, a money of account in Japan; i. 196.

MASGEN, a corn measure in Germany; i. 127, 205.

MASS, see *Maass*.

MASSA, a weight in the East Indies; i. 89, 99.

MASSLEIN, a corn measure in Wirtemberg; i. 369.

MASSLING, a corn measure in Switzerland; i. 375.

MASTELLO, a wine measure at Ferrara and Rome; i. 127, 294, 346; ii. 235.

MATH, a money of account at Rangoon; i. 115.

MATTARO, an oil measure of Tripoli and Tunis; i. 337, 338.

MATTHIER, a copper coin of Brunswick, Hanover, &c.; i. 53, 189, 245, 273.

MAUND, or MANUNGUS, a weight in the East Indies, in Persia, and Arabia; i. 30, 40, 89, 92, 122, 257; ii. 224.

MAUNEY, a land measure in Madras; i. 93.

MAX D'OR, or MAXIMILIAN, a gold coin of Bavaria; i. 261. Assay and value; ii. 157. Impressions; 179.

MAXIMUM, the highest price of any article, as fixed by some law or regulation.

MAZZINO, a dry measure in Corsica; i. 80.

MEASURES, general principles of, and standard; i. Introduction, xv.

MEASURES, ancient; ii. 255; cloth, 238; corn, 229; cubic, 248; itinerary, 250; land, 249; long, 244; square, 247; wine, 234.

MECMEDA, a dry measure in Mocha; i. 258.

MEDIA-TABLA, a weight in Guinea; i. 167.

MEDIMNO, a corn measure in some parts of the Levant; i. 81; ii. 230.

MEDIMNUS, an ancient Greek land measure, and also a measure of capacity; ii. 255.

MEDIDA, a liquid measure in Brazil; ii. 236.

MEDIN, or MEDINO, a coin and money of account in Egypt, Turkey, &c.; i. 4, 57, 308, 314.

MEDIO, a measure of capacity in some parts of Spain; i. 6, 343.

MEITADELLA, a liquid measure in Barcelona; i. 27.

MENGEL, see *Mingel*.

MENU, an old French long measure; i. 252.

MERCAL, a measure for grain in Pondicherry; i. 114.

MERCHANDISE, all sorts of goods that may be bought or sold.

MERCHANT, a person who deals or traffics in a large way, on his own account, or by commission for other persons.

MESS VALUTA, the money in which accounts are kept at the fairs of Bolsano; i. 44.

META, a corn measure in Milan; i. 255.

METAL, a measure for oil in Algiers and Tunis; i. 5, 338; ii. 237.

METAL WEIGHT, a weight in Sweden; i. 330; ii. 227.

METECAL, or METICAL, a weight for gold, silver, and diamonds, &c. in the Levant, Algiers, and Tripoli; i. 4, 5, 82, 337, 338; ii. 222.

METRE, the unit for long measures in the new French system; i. Introduction, xix. 134; ii. 239, 251.

METRE, or METER, a measure for oil in Turkey; i. 73.

METRETES, an ancient Greek liquid measure; ii. 256.

METRICAL, QUINTAL, 100 Kilogrammes; the term is likewise occasionally applied to all weights and measures of France, according to the new system as deduced from the Metre.

METRO, the unit for long measures in the new system of Italy; i. 256; ii. 240.

METZE, a corn measure at Vienna, and other parts of Germany; i. 350; ii. 230, &c.

MEZZAROLA, a wine measure at Genoa; i. 159.

MEZZETTA, a measure of capacity in Florence; i. 130, 131.

MIAM, a weight for gold at Malacca, and a money of account at Siam; i. 108, 114.

MIGLIAJO, a measure for oil at Venice, &c.; i. 347. Also the Italian word for 1000 lb weight.

MILE, an itinerary measure in England and other parts of Europe, varying much in different countries; i. 195, 223, 226, 309; ii. 250.

MILE, of land, 640 Acres, English statute measure.

MILL, a money of account in America; i. 353.

MILLEROLLE, a liquid measure at Marseilles; i. 252; ii. 236. It is also used at Tunis; i. 338; ii. 237.

MILLIER, a weight of 1000 Kilogrammes, by which the burden of ships is reckoned in France; ii. 251.

MILLIMETRE, MILLILITRE, &c. the 1000th part of a Metre, Litre, &c.; i. 136; ii. 251.

MILREA, or MILREE, a money of account in Portugal; i. 210, 246. Assay and value; ii. 152, 159. Impressions; 199.

MILTRA, a measure for oil in the Ionian States; i. 371.

MINA, or MINE, a corn measure in Italy and in the ancient system of France; i. 131, 133, 159, 255, 340; ii. 230. It is also a small Turkish coin; i. 72; and an ancient Greek weight; ii. 256, 260.

MINELLO, a corn measure of Verona; i. 348; ii. 233.

MINGEL, a liquid measure in Holland and Germany; i. 10, 50.

MINIMUM, the lowest price of any article as fixed by some law or regulation.

MINOT, a measure for corn, salt, &c. in the old system of France; still partially retained in Canada; i. 60, 133; ii. 230.

MINT REGULATIONS of England; i. Introduction, xxviii.; also page 217.

MIOBOLO, a copper coin in the Ionian Islands; i. 371.

MIRLITON, an old French gold coin.

MIRO, a measure for oil at Venice; i. 347; ii. 237.

MISCAL, a weight for gold, silver, pearls, and precious stones in Persia, Arabia, Turkey, and some parts of the East Indies; i. 30, 151, 257, 278, 315; ii. 222.

MISTATE, a measure for oil in some parts of the Levant; i. 62; ii. 234.

MISURA, a measure for corn, and also for land, in the Ionian States; i. 371, 373; ii. 233.

MISURELLA, a measure for oil at Naples; i. 264.

MITKUL, a gold coin and money of account in Barbary; i. 260.

MITE, an old English copper coin, and also a division of the grain Troy; i. 219.

MITER, a division of the Pound Flemish; i. 19.

MITRE, a liquid measure at Tunis; i. 338.

MITTLEN, a corn measure at Ulm; i. 352.

MOCHA, a weight in Abyssinia; i. 2.

Moco, a small silver coin in the West Indies; i. 362.

Modius, an ancient Greek land measure; ii. 255. Also a Greek and Roman measure of capacity; ii. 256.

Moeda, see *Joanese*.

Moggia, a measure for land in Naples; i. 264, 373; ii. 249.

Moggio, an Italian measure chiefly used for corn; i. 127, 251, 255, 346, 371; ii. 256.

Mohur, a gold coin in the East Indies; i. 88. Assay and value; ii. 161. Translation of legends; 217.

Moidore, an old gold coin of Portugal; i. 211. Assay and value; ii. 159. Impressions; 199.

Molt, a corn measure of Oldenburg; i. 273.

Mondello, a corn measure in Sicily; i. 313.

Mondino, a dry measure in Genoa; i. 159.

Moneta, the Italian word for money.

Moneta Bianca, Moneta d'oro, in Nuremberg; i. 270.

Moneta Buona, Moneta Lunga, in Leghorn, &c.; i. 44, 48, 129, 199.

Moneta di Cartularo, of Genoa; i. 155, 157.

Moneta Corrente, *Current Money*.

Moneta del Giro, of Bolsano; i. 44.

Moneta Imperiale, of Milan; i. 254.

Moneta di Paghe, of Genoa; i. 157.

Moneta di Permesso, of Genoa; i. 155.

Moneta Piccola, of Venice; i. 344.

Moneta Provinciale, of Venice; i. 345.

Money, defined; i. Introduction, xxxiii.

Monies of Account; i. Introduction, xxxiii.; ii. 149.

Monies of Exchange; ii. 18 to 103.

Money, black and white, of Bavaria; i. 285.

Monkelser, see *Guerze*.

Monopoly, the engrossing of a commodity in one or few hands.

Moo, a weight in Pegu; i. 113, 115.

Mood, a measure of capacity in Morocco; i. 260.

Moon, a weight in some parts of India; i. 99.

Moose, a dry measure in Cyprus; i. 81.

Morah, a measure for grain in Bombay, &c.; i. 96, 109, 112.

Morgen, a land measure in Holland, Germany, &c.; i. 11, 35, 325, 369; ii. 249.

Mortgage, a pawn of lands, houses, or goods given as security for money lent: the borrower is called the *Mortgager*, and the lender the *Mortgagee*.

Motureau, a corn measure at Nice; i. 269.

Mouver, a corn measure in some parts of Holland.

Moyo, a wine measure in Spain; i. 150, 322; ii. 235; and a corn measure in Portugal; i. 212.

Mozzetta, a dry measure in the Ionian States; i. 371.

Muce, a liquid measure in the French West India Islands; i. 364.

Mucke, a corn measure at Antwerp; i. 21.

Mudde, a corn measure in Holland and Basil; i. 10, 28, 268; ii. 229, &c.

Muhlmassel, a corn measure at Vienna; i. 350.

Muid, a measure of capacity in France and Germany; i. 133, 258, 292.

Mülcts, fines laid on ships or goods, and applied to the maintenance of consuls, garrisons, &c.

Muntze, German for *small coins;* the word is also applied to the money in which accounts are kept in many parts of Germany; i. 24, 69, 147.

Murajola, a small coin in Bologna; i. 42.

Muschje, or Mutsje, a liquid measure in Holland; i. 10, 297.

Muscal, see *Miscal.*

Mutchkin, a liquid measure in Scotland; i. 310.

Muth, a measure of capacity in some parts of Germany; i. 45, 350.

Mütt, a corn measure in Switzerland; i. 39, 375; ii. 229, &c.

Myriare, Myriagramme, Myrialitre, Myriametre, 10,000 ares, grammes, &c. in the new French system; i. 136; ii. 251.

N

Nail, a division of the yard in England; i. 223.

Napoleon, a French gold coin; i. 141. Assay and value; ii. 158. Impressions; 184.

Nasara, a silver coin at Tunis.

National Debt, see *Stocks;* i. 239.

Naulage, the freight for carrying goods or persons by sea, or over a river.

Navy Bills, see *Bills, Navy.*

Neat, or Net Weight, the weight of any commodity alone, without the cask, bags, dross, &c.; i. 229.

Nello, a weight in Sumatra, Pondicherry, &c.; i. 97, 114, 122.

Net Proceeds, the amount or sum which goods produce after every deduction is made.

Neve, a weight in Masulipatam; i. 110.

Nietro, a wine measure in Arragon; i. 23.

Noble, an old English gold coin; i. Introduction, xxx.; also page 216.

Noir, or Dog, a copper coin in the French West India Islands; i. 363.

Nonclaim, where a creditor neglects to make his claim within due time, in which case he cannot enforce his demand.

Nossel, a liquid measure in some parts of Germany; i. 55, 127, 190, 206, 373.

Notary Public, a person duly appointed to attest deeds and other writings; and also to note and protest bills of exchange, or drafts or notes, when refused or returned.

Note, an order in writing for money; likewise a security for money. See *Bank Notes.*

Notes, Promissory; ii. 8.

Noting, is the act of a notary, signifying that a bill will be protested immediately, or that it will be protested if not duly honoured when it becomes due.

Nusfieah, a liquid measure in Arabia; i. 40, 258.

O

Oban, a gold coin of Japan; i. 196.

Obligation, a bond containiug a penalty, with a condition annexed for the payment of money, the performance of covenants, &c.

Obligee, he to whom a bond is made payable.

Obliger, he that enters into a bond, or he by whom it is to be paid.

Obolo, a money of account and copper coin in the Ionian Islands; i. 370.

Obolus, an ancient Greek weight; ii. 256.

Occa, an old Hungarian weight; i. 192. It is also a Turkish weight, see *Oke.*

Ochavo, a money of account and copper coin in Spain and the Canary Isles; i. 61, 248, 265, 316, 319. It is also a weight for silver in Spain; i. 320.

Octave; i. 291.

Odor, a measure for oil in Majorca; i. 248.

Oertgen, a money of account in Embden; i. 287.

Oertlin, a weight in Reval; i. 287.

Oessel, a liquid measure of Berlin, Hamburg, &c.; i. 35, 171.

Ohm, a wine measure in Germany, Prussia, and Switzerland; i. 28, 35, 71, 83, 283, 324, 369; ii. 234, &c.

Oitava, a small weight in Portugal; i. 58.

Oke, Oka, or Occa, a Turkish and Arabian weight; i. 4, 30, 58, 72, 81, 276, 284, 315, 371; ii. 222.

Olla, a liquid measure in Galicia; i. 150.

Ollock, a measure of capacity at Madras; i. 93.

Omnium, see *Stocks;* i. 239.

ONCETTA, a gold coin of Naples; i. 263. Assay and value; ii. 159.

ONCIA, a weight in Italy; i. 130, 346.

ONZA, a money of account and gold coin of Sicily; i. 313. See *Ounce.*

ORDNANCE DEBENTURES, bills issued by the board of ordnance, for the payment of stores, &c. purchased for that department.

ORE, a money of account and copper coin in Sweden; i. 327.

ORLONG, a land measure in the Prince of Wales's Island; i. 114.

ORNA, a liquid measure at Fiume and Trieste; i. 128, 336; ii. 235.

ORT, a money of account in Germany, Norway, Denmark, Riga, &c.; i. 32, 70, 74, 125, 207, 288. It is also a weight in Denmark; i. 76; and a dry measure in Sweden; i. 331.

ORTGEN, a small weight in Hanover; i. 190.

OSELLA, a gold coin of Venice; ii. 161. Impressions; 214.

OSELLA, a silver coin of Venice; i. 315. Assay and value; ii. 169. Impressions; 214.

OSMINE, a measure of capacity in Russia; i. 301.

OTTAVA, a weight for gold and silver in Bologna; i. 42.

OTTINGAR, a liquid measure in Finland; i. 332.

OUNCE, a division of the Pound in most countries.

OUNCE, or ONZIA, a money of account in Sicily; i. 313; ii. 152. Also a Sicilian coin both of gold and silver; i. 313. Assay and value; ii. 160. Impressions; 206.

OUNCE, a silver coin of Malta; i. 250. Assay and value; ii. 164. Impressions; 192.

OUTAVA, a division of the Mark in Portugal; i. 211.

OXHOFT, OXHOOFD, or OXHUFVUD, a wine measure in many parts of Europe; i. 10, 35, 77, 171, 280, 301, 324, 331; ii. 235.

OXYBATHON, an ancient Greek liquid measure; ii. 256.

P

PACE, a long measure in England and other countries; i. Introduction, xv. 213, 223.

PACK, of cloth, in Germany, 220 pieces; i. 164.

PACK, a parcel of goods of various weights put up for carriage; a pack of wool is generally 240 lb.

PACKER, a person who carries on the trade of packing goods.

PAGLIAZZA, a liquid measure in Cephalonia; i. 372.

PAHAW, a weight in Borneo; i. 119.

PAGODA, a gold coin in the East Indies; i. 90. Assay and value; ii. 161. Description; 217. It is also an East India weight for gold and silver; i. 91, 92; ii. 223.

PAJACK, a corn measure in Russia; i. 301.

PALESTA, an ancient Greek long measure; ii. 255.

PALLY, a measure of capacity in the East Indies; i. 89, 119.

PALM, or PALMO, a long measure in many countries; i. 33, 63, 159, 172, 213, 223, 290, 322; ii. 240, 244, 259.

PALMA, a long measure of the ancient Romans; ii. 257.

PAN, a long measure in the old system of France; i. 252, 259; ii. 245.

PANAL, a measure for corn at Marseilles; i. 252.

PANCHING, a half cocoa nut shell used as a measure in the Sunda Isles; i. 118.

PANILLO, a liquid measure of Spain; i. 322.

PAOLO, a small silver coin at Florence, Rome, and other places in Italy; i. 18, 42, 127, 129, 199, 292. Assay and value; ii. 166.

PAPER CREDIT; i. Introduction, xxxvi.

PAPER MONEY; i. Introduction, xxxvi.

PAPER MONEY, of Sweden; i. 333.

PAPER MONEY, of Portugal; ii. 72.

PAPETTO, a small silver coin of Rome; i. 293. Assay and value; ii. 166.

PAR DATE, of Bills; ii. 12.

PAR OF EXCHANGE, explained; ii. 13; Computations of, 140; Table of, 146.

PARA, a small Turkish coin; i. 72, 307, 314. Also, the same as Diwani, a coin of Abyssinia; i. 1.

PARAH, a corn measure in the East Indies; i. 93, 96, 205.

PARASANG, the Persian league; i. 278; ii. 250, 259.

PARDO, or PARDAO, a silver coin and money of account at Acheen and Goa; i. 97, 106.

PARPAJOLA, an old base silver coin of Genoa; i. 157.

PARRAH, a measure of capacity in Ceylon; i. 105.

PART OWNERS, persons possessed of certain shares of ships.

PASS IN CONFORMITY, to acknowledge that an account transmitted is corrected.

PASSIER DUCATS and PISTOLES; i. 161.

PASSO, a long measure in Portugal, Spain, and Italy; i. 213, 264, 322, 372.

PASSUS, an ancient Roman itinerary measure; ii. 257.

PATACA, a silver coin of Brazil; i. 211, 290. Assay and value; ii. 166. Impressions; 200.

PATACA, a money of account at Naples; i. 263.

PATACA, the name given in Egypt to the German dollars; i. 1, 57.

PATACA CHICA, and PATACA GOURDA, two monies of account at Algiers; i. 5.

PATACK, a coin in Batavia; i. 101.

PATACON, or PATAGON, a silver coin in Switzerland, and also at Liege; i. 38, 152, 209. Assay and value; ii. 162, &c. Impressions, 179, &c.

PATACON, Spanish, the same as the Hard Dollar.

PATACON RIXDOLLAR, a money of account and of exchange at Antwerp; i. 19.

PATARD, a copper coin in Flanders; i. 19, 85.

PATTY, a small coin in Trangania; i. 121.

PAUNCHEA, a money of account in Bombay; i. 93.

PAYEE, the person to whom a bill is made payable; ii. 2.

PAYEMENTS, or PAYMENTS, certain periods at Lyons and other places on the Continent, at which bills are generally made payable.

PECCO, a money of account in some parts of Java; i. 100.

PECK, a measure for dry commodities in England; i. 220, 221, 227, 310.

PECK LOAF, weight of; i. 221.

PECUL, or PICUL, a weight in China and some parts of the East Indies; i. 67, 98, 122, 197.

PENALTY, a forfeiture or fine for disobedience to certain laws or regulations; a penalty is also occasionally annexed to secure the payment of money, or the performance of any contract.

PENDULUM, SECONDS, length of, in different latitudes; i. Introduction, xvii. xix.

PENNING, a money of account in Holland and the Netherlands; i. 8, 19. Also a small weight in Germany and Switzerland; i. 3, 375.

PENNY, a copper coin in England; i. 216.

PENNY FLEMISH, see *Grote*.

PENNYWEIGHT, a division of the ounce Troy in England and Holland; i. 9, 217.

PERCH, a land measure in England, France, and other countries; i. 11, 195, 223, 226.

PERIOT, a division of the English grain; i. 219.

PERMIS, exchange money in Flanders; i. 19.

PERMIT, a licence or warrant for the passing or selling of goods, which have paid duty or excise.

PERPERO, a silver coin of Ragusa; i. 284.

PERPETUITY, the number of years purchase to be given for an annuity that is to last for ever.

PERTICA, a long measure and land measure in Italy; i. 81, 131.

PES, an ancient Roman long measure; ii. 257.

PESAGE, money paid for weighing goods.

PESETA, a Spanish silver coin; i. 253. Assay and value; ii. 168.

PESETA MEXICAN, a Spanish silver coin, the quarter of the dollar; i. 319. Assay and value; ii. 168. Impressions; 207.

PESETA PROVINCIAL, a base silver coin of Spain; i. 319.

PESO, the Spanish for a dollar. PESO DE PLATA, Dollar of Exchange; PESO DURO, Hard Dollar; i. 313. Assay and value; ii. 168. Impressions; 208.

PESO, the Italian for weight. PESO GROSSO, and PESO SOTTILE, the heavy and light weight in Genoa, Venice, &c.; i. 31, 159, 255, 346; ii. 224, &c.

PESO, a weight in Damascus; i. 82.

PETERMANGEN, a money of account of Coblentz and Treves; i. 69.

PEZZA, PEZZA DA OTTO REALI, or PEZZA DELLA ROSA, a money of account and silver coin of Tuscany; i. 129, 199. Assay and value; ii. 151, 169. Impressions; 212. The word Pezza sometimes means the *Dollar*.

PEZZA, a land measure in Rome; ii. 249.

PFENING, a money of account in Germany, Denmark, Poland, and Prussia; i. 33, 74, 82, 161, 278, 348. It is also a small weight; i. 163, 170, 205, 271, 350.

PFUND, German for *Pound*, which see.

PFUNDSCHWER, in Germany, 300 lb.; i. 273.

PFUNDFENING, a money of account in Bavaria; i. 285.

PHERRA, a corn measure in Surat; i. 119.

PIASTRE, a money of account and silver coin in Turkey and the Levant; i. 4, 40, 57, 72, 257, 276, 307, 308, 314, 371; ii. 150. Assay and value; ii. 168. Inscriptions; 211.

PIASTRE, a general term for the Spanish dollar.

PIASTRINE, see *Pistereen*.

PIC, or PIKE, a long measure in Turkey, Egypt, &c.; ii. 238.

PICCIOLO, a money of account in Sicily and Malta; i. 249, 263, 313.

PICCOLO, a term applied to the effective currency of Venice, i. 344. Also a money of account in Bergamo; i. 31.

PICE, a money of account and copper coin in the East Indies; i. 87.

PICOTIN, an old dry measure in France; i. 246, 252. Also in Barcelona; i. 27.

PIECE OF EIGHT, the Spanish Dollar. Also a money of account in the Dutch and Danish West India Islands; i. 365.

PIECE OF TWO-THIRDS, see *Thirds*.

PIECE, a measure for brandy in Bourdeaux; i. 47. Also a liquid measure in Germany; i. 148, 171.

PIED, or PIED DE ROI, the French Foot in the old System of measures; i. 134; ii. 245, 252.

PIERAGE, money paid for the use of a pier.

PIG, of Lead, 301 lb.

PIGNATA, a measure for oil at Gallipoli and Naples; i. 151, 264.

PIKE, see *Pic*.

PILOTAGE, money paid for piloting a ship.

PINT, PINTA, or PINTE, a measure of capacity in England and other countries, varying in different places; i. 221, 310, &c.; ii. 237.

PINTGER, a measure for wine in Cologne; i. 71.

PIPE, a wine measure in England, Spain, Portugal, &c.; i. 212, 222, 227.

PIPE, of salt; i. 47.

PISO, a weight on the coast of Guinea; i. 167.

PISTEREEN, or PIASTRINE, the name given in the West Indies to the Spanish Peseta; i. 360, &c.

PISTOLE, German, a gold coin; i. 64. Assay and value; ii. 157, &c. Impressions; 189, &c.

PISTOLE, Italian, see *Doppia*.

PISTOLE, Spanish, see *Doubloon*.

PISTOLE, Swiss, a gold coin; i. 28, 38, 152. Assay and value; ii. 157, &c. Impressions; 179, &c.

PITIES, small leaden coins in the isle of Java; i. 101, 112.

PIX, trial of; i. 218.

PLACK, a small Scottish coin; i. 309.

PLACKET, or PLAQUETTE, a silver coin in the Netherlands; i. 20. Assay and value; ii. 165.

PLAPPERT, a money of account in Switzerland; i. 28.

PLATE, or PLATA, old and new, two monies of account in Spain; i. 316; ii. 89.

PLATES, large copper coins in Sweden; i. 328.

PLOTT, a Swedish silver coin; ii. 168.

POCKET, of wool, 120 lb.; of hops, 1¼ cwt.

POEGEL, a liquid measure in Denmark; i. 77.

POELE, a liquid measure in some parts of Denmark; i. 77.

POIDS DE FER, the pound for heavy goods at Neufchatel; i. 269; ii. 226.

POIDS FOIBLE and POIDS FORT, the light and heavy pound used in Geneva; i. 153; ii. 225.

POIDS DE MARC, the legal French weight according to the old system; i. 133; ii. 222, 225.

POIDS DE SOIE, an old weight used at Lyons; i. 245; ii. 226.

POIDS DE TABLE, or POIDS DE VILLE, a weight used at Lyons and Marseilles; i. 245, 252; ii. 226.

POIDS DE VICOMTÉ, a heavy pound used at Rouen; i. 298; ii. 227.

POINCON, a measure for brandy in some parts of France.

POLE, a long measure in England, &c.; i. 195, 223.

POLICY OF INSURANCE, an instrument or writing given by the insurers of a ship or goods to the merchant or owner, by which they engage to pay the sum insured, in case of loss.

POLLAM, a weight at Madras and other parts of the East Indies; i. 92.

POLLEGADA, a long measure in Portugal; i. 213.

POLONICK, a corn measure at Trieste; i. 336; ii. 232.

POLPOLTIN, a Russian silver coin; i. 299. Assay and value; ii. 167.

POLTIN, a Russian coin, both gold and silver; i. 299. Assay and value; ii. 160, 167; Impressions; 204.

POLTURAT, a copper coin of Hungary; i. 192.

POLUSHKA, a copper coin of Russia; i. 299.

PONTE, a money of account in Sicily; i. 313.

POOD, a Russian weight; i. 301.

POOL, a weight used on the Malabar coast; i. 102.

POOT, a piece of tin, used as a money and as a weight in Junkceylon; i. 107.

PORRONE, a liquid measure in Barcelona; i. 27.

PORTAGE, money paid for sailors' wages while in port.

PORTERAGE, money paid to porters for their service in landing or shipping goods, &c.

PORT SALE, a sale of goods upon the key. Also a sale to the highest bidder.

PORTUGALESE, a gold coin in Lubec; i. 241.

POSSE, a land measure in Switzerland.

POST ENTRY, an additional entry made by a merchant at the custom-house, when the first entry that he made is found to be too small.

POT, of ale, a liquid measure in England, generally one quart. Also a liquid measure in France, Switzerland, Denmark, &c.; i. 28, 47, 77, 85, 153, 252, 326.

POTE, a liquid measure in Portugal; i. 212.

POTÉE, an old wine measure in France; i. 85.

POTTLE, a measure for corn and other dry commodities in England; i. 221.

POUAH, see *Pice*.

POUCE, a French long measure; ii. 252.

POUGNERÉE, a land measure in some parts of France; i. 47.

POUND, the unit for weights in England, and in most parts of Europe; i. Introduction, xx. 220, 309; ii. 222.

POUND, a money of account in the British islands and colonies, and in North America; i. 59, 216. Also a money of account in Strasburgh, and some parts of Germany; i. 326, 369.

POUND FLEMISH, a money of account in Flanders; and a money of exchange at Amsterdam and Hamburg; i. 8, 19, 167; ii. 28, 65, 149.

POUNDAGE, a duty formerly paid to the king of one shilling in the pound on all goods imported and exported, except such as paid tonnage, and on bullion, diamonds, and a few others.

POWER OF ATTORNEY, see *Letter of Attorney*.

PRAN, a division of time in the East Indies; i. 87.

PRE-EMPTION, a first buying, or buying before others.

PREMIUM, the money paid for insuring ships, goods, houses, &c.

PRICE CURRENT, a list published in commercial places of the current value of commodities.

PRIMAGE, a certain allowance or per centage on freight, paid to the captain and mariners of a ship at their setting out or coming into a port.

PRINCIPAL, the capital sum lent or due.

PRISAGE, the share belonging to the king, out of such merchandise as is taken at sea, in the way of lawful prize.

PROCURATION, see *Letter of Attorney.*

PRODUCE, in mercantile affairs, the native commodities of a country.

PROMISSORY NOTE; ii. 8.

PROTEST OF A BILL; ii. 5.

PROVENDA, a corn measure in Ancona; i. 18.

PUBBLICA, a money in the kingdom of Naples; i. 263.

PUCCA, a weight in the East Indies; i. 96, 123.

PUDDY, a measure of capacity at Madras; i. 93.

PUL, a division of time in the East Indies; i. 87.

PULGADA, Spanish for *Inch*; i. 322.

PUNCHEON, a liquid measure in England; i. 222, 227.

PUNN, a money of account in Bengal; i. 88.

PUNKHO, a weight for gold and silver in Bengal; i. 89.

PUNT, or PONT, a long measure in China; i. 68.

PURSE, in Turkey, a sum of 500 Aspers; i. 72; in Egypt of 75,000 Aspers; i. 4.

PURSER, of a ship, a person who keeps the accounts of a ship, and has the care of the provisions.

PUSSAREE, a measure of capacity in Bengal; i. 89.

PUTTO, a measure of capacity in Aurungabundar; i. 99.

Q

QUADRANS, among the ancient Romans, the fourth part of any quantity, as of the foot, pound, &c.; ii. 257.

QUADRATO, a land measure in Tuscany; ii. 249.

QUADRUPLE, a Spanish gold coin; i. 320. Assay and value; ii. 160. Impressions, 207.

QUAN, a coin in Faifoe; i. 105.

QUARANTINE, the time that a ship, suspected of infection, is obliged to keep from all intercourse with the shore; also certain duties imposed on ships for the purposes of quarantine.

QUART, a measure of capacity in England, France, Germany, &c.; i. 35, 50, 83, 133, 221, 227, 283, 310; ii. 235.

QUART, of butter, at Libau; i. 208.

QUARTALE, a corn measure in Arragon; i. 23.

QUARTARO, a measure of capacity at Milan, Venice, &c.; i. 255, 314.

QUARTAROLE, a measure for corn in some parts of Italy; i. 43, 276, 346.

QUARTAUT, a wine measure in some parts of France; ii. 234.

QUARTEEL, a measure for train oil at Amsterdam, Hamburg, &c.; i. 171.

QUARTEL, a liquid measure at Munich; i. 262.

QUARTER, a corn measure in England; i. 221, 228. Also, a measure of capacity in Sweden; i. 331; and a liquid measure at Bremen; i. 50.

QUARTERA, a corn measure in some parts of Spain; i. 27, 248.

QUARTERÉE, an old land measure in France; i. 252.

QUARTERON, or QUARTERONE, a liquid measure at Geneva, and in some parts of Italy and Spain; i. 153, 159, 322.

QUARTIER, a liquid measure in Germany; i. 52, 171, 242, 273. Also a corn measure at Nice; i. 269.

QUARTIERE, a corn measure in Italy; i. 340.

QUARTICINO, a corn measure in Bologna; i. 43.

QUARTILLO, a measure of capacity in Portugal and Spain; i. 150, 212, 322. It is also a weight in Arragon; i. 23.

QUARTIN, a liquid measure in Majorca; i. 248; ii. 236.

QUARTINHO, a gold coin of Portugal; ii. 199.

QUARTINILLO, a liquid measure in Majorca; i. 248.

QUARTINO, a corn measure at Ferrara, Milan, &c.; i. 127, 255.

QUARTLIN, a wine measure in Germany and Switzerland; i. 64, 376; ii. 234.

QUARTO, a money of account and copper coin in Spain; i. 318, 542. Also a weight for gold and silver; i. 27, 266, 342. It is likewise a long measure in Valencia; i. 343.

QUARTO, a measure of capacity in Italy; i. 127, 159, 264, 294, 346. It is also a weight at Venice; i. 346.

QUARTUCCE, a measure of capacity in Italy; i. 130, 294, 314, 346, 371.

QUATTRINO, a copper coin in Italy; i. 42, 127, 199, 243, 292, 339. It is likewise a long measure in Tuscany; i. 131.

QUENTIN, a small weight in Germany, Norway, &c.; i. 32, 34, 76, 162, 329, 350.

QUEST-MEN, persons appointed to inquire into abuses, especially such as relate to weights and measures.

QUEUE, a wine measure in the old system of France.

QUILATE, Spanish and Portuguese for *Carat*; i. 211, 319.

QUILLOT, see *Killow*.

QUINT and QUINTIN, see *Quentin*.

QUINTAL, or KINTAL, a weight in England varying from 100 lb. to 120 lb.

QUINTAL, a weight on the continent; also in Turkey, Egypt, &c.; i. 4, 6, 39, 72, 201, 342.

QUINTAL METRIQUE; 100 Kilogrammes; i. 139; ii. 251.

QUINTEL, a weight in Breslau; i. 51.

QUINTLIN, a weight in Switzerland, Germany, and Prussia; i. 38, 82, 205, 271, 375.

QUINTO, a weight in Guinea; i. 167.

QUIRE, of Paper, 24 sheets.

QUOTATION, a term generally applied to a list of the prices of exchange; ii. 19, &c.

QUOTED ON BOARD, a price for which a merchant agrees to put goods on board, free from expenses of shipping to the buyer.

R

RABATT, see *Rebate.*

RACK WINES, wines drawn off, and cleansed from the lees.

RACIONE, a corn measure in Cadiz and Malaga; i. 56, 248.

RADER FLORIN, a money of account in Cologne; i. 70.

RAFACTION, see *Refaction.*

RAGE, a dry measure in the Sunda Isles; i. 118.

RAGUSINA, a silver coin of Ragusa; i. 284. Assay and value; ii. 166. Impressions; 201.

RAIE, an old French land measure; i. 307.

RAIK, a measure for grain in Bengal; i. 89.

RAPPE, a small coin and money of account in Switzerland; i. 27, 334, 374.

RASH, a measure for salt in Bombay; i. 96.

RASIERE, or RAZIERE, a corn measure at Dunkirk and other parts of Flanders; i. 85; ii. 230.

RASO, a cloth measure in Italy; i. 308; ii. 243.

RATE OF COINAGE, see *Mint Regulations.*

RATHSPRÆSENTGER, a silver coin of Aix-la-Chapelle; ii. 162. Impressions; 177.

RATISBONINA, a money of account of Ratisbon; i. 285.

RATTLE, or RATTEL, a weight in Arabia; i. 30, 40, 257, 278; ii. 260.

RAZIERE, see *Viertel;* also *Rasiere.*

REA, see *Ree.*

REAL, a Spanish money of account, and silver coin; i. 316, 342; ii. 152. Assay and value; ii. 167. Impressions; ii. 207.

REAL, or REALE, a money of account at Florence and Sardinia; i. 129, 307.

REAM, of paper, 20 quires.

RE-ASSURANCE, a contract by which a first insurer relieves himself from the risks he has undertaken, and throws them upon other underwriters, called re-assurers.

REBATE, or RABATT, a deduction of so much per cent from the stipulated price of goods; i. Introduction, xxxv. also pages 16, 176.

REBEBE, a corn measure in Egypt; i. 4; ii. 229.

RECEIPT, a written acknowledgement of having received a sum of money.

RECIPISSÉ, see *Receipt.*

REE, the money of account in Portugal; i. 210, 246. Also an imaginary money at Bombay, &c.; i. 93, 102.

RE-EXCHANGE, the price of a new exchange due upon a bill that has been protested; which new exchange must be refunded by the drawer or indorser to the holder of a bill.

REFACTION, a deduction from the weight for damage; i. 16.

REFUNDING, the paying back of the money received in consideration of a contract that has not been fulfilled.

REGENSBURGER, a money of account of Ratisbon.

REGRATING, buying and selling again in the same market, corn and other provisions.

REICHSFLORIN, or REICHSGULDEN, see *Florin*.

REICHSTHALER, see *Rixdollar*.

RELEASE, the relinquishing of any right of action, which a man has or may claim against another.

REMANCIPATE, to sell or return a commodity to him that first sold it.

REMEDY of the Mint; i. Introduction, xxviii.

REMITTANCE, the act of sending money or bills of exchange to a distant place; ii. 105.

RENTE, in the French funds, a term synonymous with income or annuity; i. 146.

RESCONTRE, or SCONTRO, a manner of settling the payment of bills of exchange in some places on the Continent, as at Augsburg, Bolsano, Novi, &c.; i. 26.

RESPONDENTIA, a bond or contract by which money is borrowed on the security of goods, the same as in bottomry on the security of ships.

RESTIERE, a corn measure of Sardinia; i. 308.

RESTITUTION, is when any money has been paid wrongfully or by mistake, the person so paying has a right to demand it back.

RETAIL, dealing in commodities in small quantities.

RETENUE, a deduction made at the mint of France for coining gold or silver; i. 142.

RETURNS, a term expressing the value, either in goods or in money, returned by the consignee of a cargo or parcel of goods to the consigner. The term is also applied to a return of bills.

RETURNS, in exchange; ii. 105.

REZAL, a measure for corn at Strasburg; i. 327.

RIAL, see *Real*.

RICHTPFENNING, a small division of the Cologne weight; i. 71, 170, 350.

RICKSGOLD, or RICKSGALD, a paper currency in Sweden; i. 333.

RIESSE, a term used in reckoning in Germany; i. 164.

RIGSBANK, of Denmark; i. 79.

RIKSDALER, see *Rixdollar*.

RING, in Germany, signifies 240 pieces; i. 84, 164, 177.

RING, of staves, in Hamburg; i. 177.

RIXDOLLAR, a money of account and silver coin in most countries on the continent; i. 8, 27, 33, 74, 160, 327; ii. 149. Assay and value; ii. 162, &c. Impressions; 178, &c.

RIXFLORIN, see *Florin*.

ROBI, a long measure in Algiers; i. 5.

ROD, see *Pole*. ROD is also a long measure and superficial measure in Sweden; i. 331.

ROED, see *Perch*.

ROENENG, an itinerary measure at Siam; i. 118.

ROOD, a land measure in England; i. 195, 224, 226, 309.

ROPE, a long measure in England; i. 223.

ROQUILLE, a liquid measure at the French West India Islands; i. 364.

ROTTOLO, a weight in many countries; i. 3, 4, 5, 58, 72, 81, 159, 247, 308, 313; ii. 222, 224.

ROUPELL, a measure for corn in Dalmatia; i. 284.

RUBBIO, a measure of capacity in Italy; i. 18, 269, 294, 340; ii. 229, 236; and also a weight; i. 159, 340.

RUBIEH, a Turkish gold coin; ii. 161.

RUBLE, a money of account and a gold and silver coin in Russia; i. 299. Assay and value; ii. 152, 160, 167. Impressions, 204.

RUNDLET, a cask for liquors containing from 3 to 20 gallons.

RUNSTICK, a Swedish money of account, and copper coin; i. 328.

RUPEE, a money of account, and silver coin in the East Indies; i. 87, 94. Assay and value; ii. 170. Inscriptions; 218.

RUPEE, GOLD, see *Mohur*.

RUSPO, see *Sequin, Italian*.

RUSPONE, a gold coin of Tuscany; i. 129. Assay and value; ii. 161. Impressions; 211.

RUTHE, a long measure in several countries, and also a land measure in Germany; i. 29, 50, 83, 284, 324, 352.

RUTTEE, a weight for pearls at Bombay; i. 94. Also a gold and silver weight in Aurungabundar and Surat; i. 99, 119.

RYDER, or RUYDER, a gold coin in Holland; i. 8. Assay and value; ii. 158. Impressions; 189.

RYKSDALER, see *Rixdollar*.

RYKSORT, a Danish silver coin; i. 75.

S

SACCATA, a land measure in Italy; i. 131.

SACCO, see *Sack*.

SACK, a measure for coals, corn, and other dry goods in England; i. 222. It is also a corn measure in most countries; i. 10, 28, 126, 131, 297, 340, 371; ii. 229.

SACK of cotton wool, from $1\frac{1}{2}$ to 4 cwt.; of sheep's wool, 26 stones of 14 lb.; but in Scotland, 24 stones of 16 lb.

SACHE, or SAZE, a long measure in Russia, see *Sashine*.

SAGGIO, a division of the ounce, silk weight, in Venice, see *Sazio*.

SAIME, a money of account at Algiers; i. 5.

SALMA, a measure of capacity in Italy, Sicily, and Malta; i. 151, 250, 264, 313; ii. 231, 234.

SALVAGE, an allowance made for saving ships or goods from the dangers of the seas, or for re-capturing from an enemy.

SAMPLE, a small quantity of an article exhibited at a sale, as a specimen of the commodity.

SARPLAR, of wool, half a sack, or 40 tods.

SASHINE, the Russian fathom; i. 301.

SAT, a corn measure at Siam; i. 118.

SATARE, a corn measure at Bergamo; i. 31.

SATTALIE, a money of account at Bencoolen and Batavia; i. 100, 118.

SAUM, a liquid measure in Germany and Switzerland; i. 28, 39, 375. Also a weight; i. 350; and a term used in reckoning in Germany; i. 164.

SAZIO, a weight at Venice; i. 346.

SCALIN, see *Escalin*.

SCANDAGLIO, see *Escandaglio*.

SCHAAF, a money of account in Emden; i. 125.

SCHAFF, a corn measure in some parts of Germany; i. 25, 261, 286; ii. 229.

SCHEDULE, the statement of effects delivered by a bankrupt to the commissioners, who are appointed to investigate his affairs.

SCHEFFEL, a corn measure in Germany, Prussia, and Switzerland; i. 28, 35, 171, &c.; ii. 229, &c.

SCHEFFEL, a land measure at Hamburg; i. 172; ii. 249.

SCHEPEL, a corn measure in Holland; i. 10, 268.

SCHERFFE, a money of account in Luneburg; i. 245.

SCHLECHTHALER, a money of account in Aix la Chapelle; i. 2.

SCHILLING, or SHILLING, a money of account and copper or base silver coin in several parts of Germany, Holland, and Poland; i. 8, 70, 82, 161, 241, 272, 278, 324.

SCHIFPFUND, see *Shipfund*.

SCHOCK, see *Shock*.

SCHOPP, a liquid measure of Francfort and Wirtemberg; i. 148, 369.

SCHOTT, a small weight in Prussia; i. 82.

SCHUIT, a silver ingot used as money in Japan; i. 197.

SCHWARE, see *Sware*.

SCILIQUE, a division of the apothecaries weight in the old system of France; i. 133.

SCONTRO, see *Rescontre*.

SCORZO, a dry measure in Rome; i. 294.

SCRUPLE, or SCRUPULE, a small weight in England and other countries, used chiefly by apothecaries; i. 133, 220.

SCRUPULE, a long measure at Ulm; i. 352.

SCRUPULUM, a division both of the weights and measures of the ancient Romans; ii. 257, 258.

SCUDINO, a gold coin of Modena; i. 258.

SCUDO, a silver coin in Italy, Sicily, and Malta; i. 243, 249, 255, 275, 339. Assay and value; ii. 167, &c. Impressions; ii. 191, &c.

SCUDO, is also a money of account in different parts of Italy, and also at Sicily and Malta; i. 18, 31, 249, 313; ii. 149. There are various sorts of Scudi; viz. *Scudo d'argento*; i. 157. *Scudo Bianco;* i. 251. *Scudo di Cambio;* i. 42, 127, 157, 243, 254; ii. 150. *Scudo Corrente;* i. 129, 199, 243, 254; ii. 151. *Scudo della Croce;* i. 344. Assay and value; ii. 163. Impressions; ii. 187. *Scudo Moneta;* i. 292. *Scudo d'oro;* i. 129, 156, 199, 243, 292; ii. 150. Assay and value; ii. 161. Impressions; ii. 213, 214. *Scudo d'oro marche;* i. 156; ii. 150. *Scudo Romano;* i. 292; ii. 152. *Scudo di stampa d'oro;* i. 292; ii. 152.

SEAH, an ancient Jewish measure of capacity; ii. 259.

SEAM, of glass, 24 stone, each stone 5 lb.; of corn or malt, 8 bushels; i. 220.

SECCHIO, a liquid measure in Italy; i. 127, 346, 372; ii. 237.

SECHSER, a coin of Konigsberg; i. 198.

SECHSLING, a copper coin of Hamburg.

SECHTER, a corn measure in Frankfort; i. 148.

SECHZENERLIS, a measure of capacity in Bern; i. 39.

SECOND, a common division of time and space; i. 39, 138, 223.

SEER, a weight in the East Indies; i. 89, 92, 96, 109, 122; ii. 226.

SEIDLE, a liquid measure of Augsburg, Ratisbon, and Vienna; i. 271, 286, 350.

SEIGNIORAGE; i. Introduction, xxviii. xxx.

SEIL, in Dantzic, 10 ruthes; i. 83.

SEIZURE, an arrest of merchandise, moveable, or other matter, in consequence of some law or order from government.

SELEMINE, a corn measure in Portugal and Spain; i. 212, 248.

SEN, a long measure in Siam; i. 118.

SEQUIN, Italian, a gold coin; i. 42, 129, 255, 293, 344. Assay and value; ii. 158, &c. Impressions; ii. 187.

SEQUIN, Turkish, a gold coin; i. 4, 5, 40, 72, 338. Assay and value; ii. 161. Inscriptions; ii. 210.

SERON, a package for different sorts of dry foreign goods; a Seron of barilla is 3 cwt.; of almonds, 2 cwt.; of aniseed, from 3 to 4 cwt. &c. It is also a weight in Guinea; i. 167.

SESTE, a corn measure in Siam; i. 118.

SESTER, a corn measure of Strasburg; i. 327.

SESTHALF, a base silver coin of Holland; ii. 164.

SETERÉE, a land measure in the old system of France; i. 259.

SETIER, a measure of capacity in France, Switzerland, and Germany; i. 133, 153, 209; ii. 229, 235.

SET OFF, of mutual debts; where tradesmen are mutually indebted, one debt may be set against the other; and in case an action be brought, notice is to be given of the particular debt intended to be set off against another.

SEXTARIO, a corn measure in Persia; i. 278.

SEXTARIUS, an ancient Roman measure of capacity; ii. 258.

SEXTINGAR, a liquid measure in Finland; i. 332.

SEXTULE, an apothecaries weight in the ancient system of France; i. 133.

SEXTULUS, an ancient Roman weight and measure; ii. 257, 258.

SEYRA, see *Seer*.

SHAHEE, an imaginary money at Gamron; i. 151.

SHATREE, a Persian silver coin; i. 151, 277.

SHEKEL, an ancient Jewish weight; ii. 259.

SHERIFF, see *Xeriff*.

SHILLING, a money of account in the British islands, the West Indies, and North America; i. 59, 216, 353, 359. It is also a silver coin in England; i. 216. Assay and value; ii. 163. Impressions; ii. 183, 184.

SHILLING FLEMISH, a money of account and of exchange in Flanders, Holland, and Hamburg; i. 8, 19, 167.

SHIPFUND, SHIPPOND, or SCHIFFFUND, a large weight in Holland, Germany, Denmark, Sweden, and Norway, varying in different places.

SHOCK, or SCHOCK, a German word expressing 60 pieces; i. 50, 83, 164. Also a money of account in Saxony and Bohemia; i. 204, 280.

SHOE, a long measure at Brunswick; i. 55.

SHOE, of gold, an ingot used as money in China; i. 67.

SHŒNUS, an ancient Jewish long measure; ii. 259.

SHOSTACK, SHUSTACK, or SECHER, a money of account in Prussia, Poland, and Hungary; i. 82, 192, 278.

SHROFF, a sort of banker or money broker in the East Indies.

SIANI, a money of account in Aleppo; i. 3.

SICCA, a weight in Bengal; i. 89; ii. 222.

SICCA RUPEE, the Bengal Rupee, weighing 1 Sicca; i. 87; ii. 170. Impressions; ii. 218.

SICILICUM, an ancient Roman weight and measure; ii. 257, 258.

SIDA, see *Seer*.

SIEDEL, a measure of capacity in Bohemia; i. 281.

SILIQUA, an ancient Roman weight; ii. 258.

SILLON, an old land measure of France; i. 307.

SIMMER, a corn measure in Germany; i. 148, 271.

SIMPLIUM, an ancient Roman weight; ii. 258.

SIMRI, a corn measure of Coburg and Wirtemberg; i. 70, 369; ii. 230.

SISTRE, a corn measure in Brussels; i. 21.

SKEPPUND, a weight in Sweden; i. 328.

SKIEP, a dry measure in Denmark; i. 78.

SKILLING, a money of account and also a copper coin in Denmark, Sweden, &c.; i. 32, 74, 327.

SKOLPUND, a commercial weight in Sweden; i. 329.

SKOYCIEC, a weight in Polaud; i. 279.

SLANT, a copper coin in Sweden; i. 328.

SLETDOLLAR, a money of account in Denmark; i. 74.

SOALLEE, a dry measure in Bengal; i. 89.

SOEKEL, a weight in the Moluccas; i. 99.

SOK, a long measure in Siam; i. 118.

SOL, a money of account and copper coin in France, Switzerland, and Hamburg; i. 28, 152, 167.

SOLDO, a money of account and copper coin in Italy; i. 18, 31, 42, 127, 154, 307, 339, 344. Also a long measure in Tuscany; i. 131.

SOLOTNICK, a weight in Russia; i. 299.

SOMA, a measure of capacity in some parts of Italy; i. 18, 31, 131, 256, 294; ii. 229, 234.

SOMPAIE, a silver coin in Siam; i. 117.

SOOCOO, a money of account at Bencoolen; i. 118.

SOVEREIGN, a gold coin of England; i. Introduction, xxx. also page 216. Assay and value; ii. 158. Impressions; 183.

SOU, a money of account in Switzerland, and in the old system of France; i. 27, 38, 141.

SOUND DUES, duties collected by the Danish government from all vessels passing the Sound; i. 125.

SOUVERAIN, a gold coin in the Austrian dominions; i. 20, 255, 348. Assay and value; ii. 157. Impressions; 177.

SPAN, a long measure in most countries; i. Introduction, xv. also pages 89, 223; ii. 259.

SPANN, a corn measure in Sweden; i. 330.

SPECIE, gold and silver coin, distinguished from paper money; i. Introduction, xxxiv.

SPECIE MONEY, of Denmark; i. 74, 125.

SPECIE THALER, see *Rixdollar*.

SPINT, a corn measure in Germany; i. 50, 171, 245, 296, 373.

SQUARE MEASURE, English; i. 224, 226; ii. 247.

SQUARE FEET of different countries compared; ii. 247.

STAB, a long measure in Leipsic; i. 206.

STACK, of wood, a pile 3 feet long, 3 feet broad, and 12 feet high.

STADIUM, an ancient Greek and Jewish long measure; ii. 255, 259.

STAJO, or STAJA, a corn and oil measure in Italy; i. 127, 151, 244, 251, 255, 264, 276, 284, 340, 346; ii. 229, &c.

STAMPE, or TEMPÉ, a small coin in the West Indies; i. 362.

STAND, of pitch, from 2½ cwt. to 3 cwt.

STANDARD, a pattern for weights or measures, that is, a weight or measure of undoubted authority by which others are adjusted.

STANDARD of English coins; i. Introduction, xxviii. also page 217.

STANDARD OF VALUE, money which is a legal tender; i. Introduction, xxxii.

STANDARDS, for English weights and measures; i. Introduction, xvii.; French standards, xxv.

STANDARDING coins and bullion, reducing them to a given standard; ii. 173.

STANDPENNING, see *Ryder*.

STANGIEU, a liquid measure in Poland; i. 280.

STAPLE, a city, town, or place appointed as a public mart or emporium for the sale of goods.

STAPLE GOODS, such as are sold at a staple. The term is also applied to the principal produce of a country, and likewise to goods that are not of a perishable nature, as wool, lead, iron, &c.

STARELLO, a corn measure of Sardinia; i. 308; ii. 232.

STARO, a corn measure in Italy, and in the Morea; i. 276, 294; ii. 232.

STATERA, an ancient Greek measure; ii. 256.

STEIGE, or STIEGE, in Germany, 20 pieces; i. 164.

STEIN, or STEEN, see *Stone*.

STEKAN, a liquid measure in Holland and Germany; i. 10, 50, 171; ii. 234, &c.

STEKAR, a liquid measure in Russia; i. 301.

STELLIONATE, a term applied to tricks in bargaining, and particularly in selling another man's property.

STERE, the unit for solid measures in the new French system; i. 135, 136; ii. 251.

STERLING, English money. The term is supposed to be derived from the *Easterlings;* that is, persons from the eastern parts of Germany who are said to have fixed the English standard of silver in the reign of Richard I. The silver penny was afterwards called a *Sterling;* and the word is now applied to all lawful money of Great Britain.

STERLINO, a weight for silver in Naples; i. 264.

STIVER, a money of account and copper coin in Holland and Germany; i. 8, 19, 68, 209.

STOCK, a fund raised by a commercial company; a principal sum or property employed in trade. Stock in book-keeping, denotes the owner or owners of the books.

STOCK-JOBBER, a person who deals in public funds on his own account.

STOCKS, or public funds; i. 239.

STOF, or STOOF, a measure of capacity in Konigsberg, Liban, Pernau, Reval, and Riga; i. 198, 208, 277, 287, 289; ii. 235.

STONE, a weight in England, Holland, and Germany, varying much; i. 9, 21, 49, 84, 171, 220, 309. The German name is *Stein*.

STOOP, a liquid measure in Holland and Flanders; i. 10, 21, 297; ii. 234, &c.

STOOTER, a small Dutch silver coin.

STOP, a measure of capacity in Sweden ; i. 331.

STORAGE, warehouse rent.

STOTZE, a liquid measure in Zurich; i. 376.

STRICK, a corn measure in Bohemia; i. 281 ; ii. 232.

STRIKE, a corn measure in England; i. 221.

STRING, 30 pieces at Libau ; i. 208.

STUBGEN, a liquid measure in many parts of Germany and Denmark ; i. 50, 77, 171, 326, 373 ; ii. 234, &c.

STUCK, a liquid measure in Francfort; i. 148.

STUCKFASS, a liquid measure in Hamburg and Denmark ; i. 77, 171.

STUYVER, see *Stiver.*

STYK, in Sweden, 20 pieces; i. 332.

SUBSIDY, an aid or tribute granted to the king by a tax; also a sum paid to an allied foreign power.

SUCCALE, a measure for oil at Santa Maura ; i. 372.

SUELDO, a money of account in some parts of Spain; i. 5, 22, 316, 341.

SULTANIN, see *Sequin Turkish.*

SUM, of nails, 10,000.

SUNDISH, SPECIE, the money in which accounts are kept at the Sound, in Denmark ; i. 74, 125.

SUND DUES, see *Sound Dues.*

SUNDISH LAST, i. 125.

SUPERCARGO, a person employed on board a ship to oversee the cargo.

SUPERTARE, an additional allowance ; i. 228.

SUPRA PROTEST, ii. 6.

SURCHARGE, an overcharge; a charge beyond what is established.

SURETY, when one person becomes bound for another to pay a certain debt, or perform a certain act.

SUTTLE WEIGHT ; i. 229.

SWARE, or SCHWARE, a money of account and copper coin of Bremen and Oldenburg; i. 48, 273.

SYCEE, in China, pure gold or silver; i. 67.

SYFERT, a copper coin of Embden; i. 125.

T

TABLE, of glass, 5 square feet.

TAFFEE, a weight in Turkey; i. 72.

TALE, a weight for gold and silver in China, and in some parts of the East Indies. It is also a money of account; i. 66, 67, 97, 196, 197; ii. 222.

TALENT, a weight and coin in general use among the ancients, but very different in different countries; ii. 256, 259, 260.

TALLARO, a silver coin of Tuscany, Ragusa, and Venice; i. 251, 284, 345. Assay and value; ii. 166. Impressions; ii. 201, 214.

TALLARO, is a term applied in the Levant and other places to the dollar in general; i. 57, 130.

TALLY, a cleft piece of wood to score an account upon. Tallies are used by the officers of the Exchequer, who keep one of the clefts in the office, and give the other to the person who pays money.

TAMPANG, a weight at Malacca; i. 108.

TANGA, a money of account at Goa, in the East Indies; i. 106.

TANK, a weight at Bombay; i. 94.

TAR, a small silver coin on the coast of Malabar; i. 102, 120.

TARE, an allowance in sales of goods, generally made for the weight of chests, casks, bags, &c.; i. 228.

TARE OF CANTARO; i. 58.

TARE OF USO; i. 201.

TARIF, an account of the rates of duties imposed on merchandise. The term is sometimes applied to a duty for coining.

TARO, a money of account and copper coin of Naples, Sicily, and Malta; i. 249, 263, 313.

TARRIE, a corn measure at Algiers; i. 5; ii. 229.

TARXA, a money of account of Navarre, in Spain; i. 265.

TAVOLA, a land measure in Cremona; i. 81.

TELLERS, officers or clerks in public offices who receive and pay money.

TEMAN, a corn measure at Mocha; i. 258.

TEMIN, a money of account at Algiers and Smyrna; i. 5, 314.

TEMPÉ, see *Stampe*.

TERMINE, a weight for gold and silver at Tunis; i. 337.

TERTIAN, of wine, 2 tierces, or 84 gallons.

TESTOON, or TESTONE, a silver coin in Italy, and also in Portugal; i. 42, 129, 199, 210, 275, 292. Assay and value; ii. 166, &c. Impressions; 200, &c.

TETARLON, an ancient Greek corn measure; ii. 256.

THALER, see *Rixdollar*.

THIRDS, PIECE OF TWO, a silver coin in Germany, worth two-thirds of a rixdollar of account; i. 162. Assay and value; ii. 164, &c. Impressions; ii. 180, 188, 201. It is called in German ZWEYDRITTEL STUCK. There is also the *Drittel* or piece of *One Third*; see *Florin*.

TIBERO, a corn measure at Tripoli; i. 337.

TICA, a weight in Borneo; i. 100.

TICAL, a weight for gold and silver, and also a money of account and gold and silver coin in certain parts of the East Indies, particularly at Pegu and Siam; i. 113, 115, 117; ii. 223.

TIDESMEN, or TIDEWAITERS, officers appointed to attend the loading and unloading of ships, in order to prevent contraband trade.

TIERCE, a wine measure in England; i. 222, 227. Also a weight by which Irish provisions are sold; i. 194; and a liquid measure in Hamburg; i. 171.

TIERCON, a liquid measure in Poland; i. 280.

TIMBANG, a dry measure of Batavia; i. 101.

TIMBER, of furs, 40 skins.

TIMPFE, or TYMPFE, an old silver coin of Prussia and Poland; i. 51, 279; ii. 82, 198, 279.

TIOGUE, in Sweden, 20 pieces; i. 332.

TIPREE, a dry measure in Bombay; i. 96.

TOD, a weight for wool in England; i. 220.

TOENDE, a corn and oil measure in Denmark; i. 76; ii. 229. It is used also there as a land measure; i. 78.

TOESA, a long measure in Spain; i. 322.

TOISE, a long measure in France; i. 134; ii. 252.

TOKENS, coins issued by banks, states, or individuals, under an implied engagement of redeeming them by the legal coin of the realm.

TOLA, a weight for gold and silver at Bengal, Bombay, Surat, and other places in India; i. 89, 94, 115, 119; ii. 222.

TOLFT, in Sweden, 12 pieces; i. 332.

TOMAN, a money of account in Persia and Arabia; i. 29, 151, 277; ii. 152.

TOMINE, a weight for gold and silver in Spain; i. 56, 320.

TOMMOND, a measure for rice at Betelfagui; i. 40.

TOMOLO, a corn measure at Naples and other parts of Italy; i. 264, 313; ii. 230.

TOMPONG, a money in Malacca; i. 115.

TON, a weight in England; i. 220, 224.

TONELADA, a liquid measure in Spain and Portugal; i. 6, 212. It is also a weight in Portugal; i. 212.

TONNAGE, certain duties per ton imposed on goods. The term is also applied to the burden or number of tons carried by a ship.

TONNE, a measure of capacity in most countries of Europe; i. 32, 35, 50, 171, 287, 324; ii. 230.

TONNEAU, a measure of capacity in some parts of France; i 262, 292, 306. Also a weight of 2000lb. French, by which the burden of ships was reckoned, now replaced by the *Millier*. The Tonneau is a general term in French for a cask.

TONTINE, a loan raised on life annuities with the benefit of survivorship. Thus, an annuity after a certain rate

of interest is granted to a number of subscribers, who are divided into classes according to their ages; and annually the whole fund of each class is shared among its survivors, till at last it falls to one, and on his death it reverts to the power that first established the Tontine. The term is derived from the name of the inventor.

TOP, or TOPF, a wine measure at Breslau and other places in Germany; i. 52.

TORNESO, a copper coin in Naples; i. 264.

TOUCH, or TOQUE, the manner of expressing the fineness of gold and silver in China; i. 67. Also a method of trying their fineness in many places in India, with a stone called a Touchstone.

TOURNOIS, the name applied to French money in the old system, as sterling is to English money.

TOWYAH, a weight in Scindy; i. 116.

TOWER POUND, an old English weight for coins; i. Introduction, xxi.

TRABUC, an old French long measure; i. 269.

TRANSFER, the act whereby one party makes over his right, interest, or property to another.

TRANSIT, a custom-house warrant or pass.

TRAPESO, a weight in Malta, Sicily, and Naples; i. 250, 264, 313.

TRET, an allowance in the weight of goods of 4 lb. per 104 lb. after tare is deducted; i. 228.

TRONAGE, a custom or toll for weighing goods.

TRONE WEIGHT, an old weight still retained in Scotland; i. 309.

TROY WEIGHT, English; i. Introduction, xxi. 219, 225; Dutch; i. 9, 309.

TROYKEN, a weight for assaying in Holland.

TRULLA, an ancient Roman corn measure; ii. 258.

TRUSS, of hay or straw; i. 220. The term is sometimes applied to a bundle of cloth.

TUAL, a weight in Rangoon; i. 115.

TUB, of tea, about 60 lb.; of camphor, from 56 to 80 lb.; of vermilion, from 3 to 4 cwt.; of butter, 84 lb.

TUCHE, 22 ells in Brunswick; i. 55.

TUN, a liquid measure in England, Holland, Germany, &c.; i. 10, 49, 71, 222, 227, 283.

TUNNA, a corn measure in Sweden; i. 330; ii. 232.

TUNNAGE, an impost of so much per tun on liquors imported or exported.

TUNNELAND, a land measure in Sweden; i. 331; ii. 249.

TWIER, a measure of capacity in Aurungabundar; i. 99.

TYMPFE, see *Timpfe*.

V

VAKIA, a weight and measure in Persia, Arabia, and Abyssinia; i. 30, 40, 257; ii. 223, 224.

VALES REALES, a paper money issued by the Spanish government; i. 323; ii. 90.

VALL, or VALE, a weight for gold and silver at Bombay and Surat; i. 94, 119.

VALUTA, or VALEUR, a term applied on the continent to the prices or rates at which different kinds of monies are reekoned in commereial transactions.

VALUTA CORRENTE, a kind of money formerly used at Venice; i. 344.

VARA, a long measure in Spain and Portugal; i. 6, 23, 213, 322, 343; ii. 238.

VARAHUN, a weight in Madras; i. 93.

VAT, a coal measure in England; i. 222. Also a liquid measure in Holland and Germany; i. 10, 127, 268; ii. 236.

VEDRO, or WEDDRA, a liquid measure in Russia; i. 301; ii. 237.

VELLON, a money in which accounts are kept in many parts of Spain; i. 5, 316; ii. 26, 89.

VELT, or VELTE, a measure for brandy in some parts of France and Holland; i. 10, 21, 47, 259, 262, 292; ii. 234, &c.

VENDEE, the person who buys. VENDER, the person who sells.

VENDUE, an auction or public sale.

VERP, a corn measure of Embden, &c.; i. 126.

VERSHOK, a cloth measure in Russia; i. 301.

VERST, an itinerary measure in Russia; i. 302; ii. 250.

VERSURA, a long measure in Italy; i. 264.

VESNO, a weight in Syria; i. 4.

VICTUALIE WEIGHT, the common or commercial weight in Sweden; i. 329; ii. 227.

VIERDEVAT, a corn measure in Holland; i. 10.

VIERFASS, a corn measure at Brunswick; i. 54.

VIERLING, a corn measure in Germany, Holland, and Switzerland; i. 25, 286, 297, 369, 375. It is also a weight for assaying in Holland.

VIERTEL, a measure of capacity in Germany, Holland, and Switzerland; i. 21, 35, 50, 71, 83, 171, 281, 350, 375; ii. 229, 235.

VIERTUNG, a commercial weight at Nuremberg; i. 271.

VINTEM, a gold coin of Spain; i. 319. Assay and value; ii. 160. Impressions; ii. 207.

VINTEM, a silver coin of Portugal; i. 210; and a copper coin in the Brazils; i. 290.

VINTIN, a money of account at Goa; i. 106.

VIREMENT, a method of settling the payment of bills or mutual debts, at the fairs of Lyons and other places, somewhat after the manner of clearing, as practised by the London bankers.

VIS, or VISAY, a weight in the East Indies; i. 92.

VISLINO, see *Ragusina*.

VOG, a weight in Denmark; i. 76.

VOUA, a long measure at Siam; i. 118; ii. 242.

U

ULLAGE, what a cask of liquor wants of being quite full.

UMPIRE, a person appointed finally to settle a dispute or difference when the arbitrators cannot agree.

UNCIA, a division both of the weights and of the measures of the ancient Romans; i. Introduction, xx.; ii. 257.

UNDERWRITER, a person who insures ships, cargoes, or other risks, which he performs by writing his name under a policy of insurance.

UNZE, a corn measure in Wirtemberg; i. 369.

URDEE, a base coin and money of account in Bombay; i. 93.

URNA, an ancient Roman liquid measure; ii. 258.

USANO, see *Piso*.

USANCE, the usual term of bills of exchange drawn from one country upon another; ii. 2.

USURY, a charge of interest beyond what is allowed by law.

UTA, a money in some parts of Java; i. 100.

W

WAAG, a weight in Norway, Germany, and Sweden; i. 32, 49, 205, 330.

WAKEA, the Abyssinian ounce; i. 1.

WALL, or WAHL, in Germany and Sweden, 80 pieces; i. 83, 164, 332.

WAREHOUSE GOODS, or bonded goods, are certain articles, which, on being landed, are warehoused upon bond being given by the owner for the payment of duties, &c.

WASTE BOOK, a book containing a regular detail of the transactions of a merchant's or trader's business, set down in the order of time in which they take place.

WEBE, in Germany, 72 pieces.

WEDDRA, see *Vedro*.

WEIGHTS, defined; i. Introduction, xvi. Troy Weight of different countries compared; ii. 222. Avoirdupois Weight; 224. Ancient; 255.

WERSCHOCK, a cloth measure in Russia, see *Vershok*.

WERST, the Russian mile; i. 302; ii. 250.

WEY, or WEIGH, a weight for various articles, and also a measure for corn in England; i. 220, 221, 228.

WHARFAGE, money paid for the use of a wharf.

WHARFINGER, the keeper or owner of a wharf.

WHIBA, a corn measure at Tunis; i. 338.

WILLIAM D'OR, a gold coin of Cassel. Assay and value; ii. 158.

WISPEL, a corn measure in Germany and Prussia; i. 35, 54, 171, 205, 245, 324, 373.

WISSEL, exchange money in Flanders; i. 19.

WITTEN, an old money of account of Denmark, Pernau, Stettin, &c.; i. 74, 125, 245, 276, 370.

WOOL DRIVERS, persons who buy wool in the country, and carry it to the clothiers or markets to sell again.

WURFE, in Austria, 5 pieces of money.

X

XERAPHIN, a silver coin of Goa, in the East Indies; i. 106.

XESTES, an ancient Greek measure of capacity; ii. 256.

Y

YARD, a long measure in England; i. Introduction, xx. 223, 226; ii. 239. Also 30 acres of land.

YERMEEBESHLEK, a Turkish gold coin; ii. 161.

YUGADA, a land measure in Spain; i. 343.

YUSDROME, a name for the Turkish chequee, or pound; i. 72.

Z

ZAH, a corn measure at Tunis; i. 338.

ZAPPADA, a measure for vineyards in the Ionian states; i. 373.

ZASPEL, a measure for linen and yarn at Leipsic, &c. containing 1600 ells.

ZECCHINO, see *Sequin*.

ZENZERLI, a coin and money of account in Egypt; i. 4.

ZERMAHBUB, a Turkish gold coin, see *Sequin*.

ZIMBIS, see *Cowries*.

ZIMMER, in Germany, mostly 40 pieces; i. 50, 164.

ZLOTI, the Polish Florin; i. 278. Assay and value; ii. 165. Impressions; 199.

ZUCCA, a liquid measure in Corsica; i. 80.

ZURLO, a weight at Aleppo; i. 3.

THE END.

WORKS BY THE SAME AUTHOR.

AN INTRODUCTION TO SPHERICS AND NAUTICAL ASTRONOMY.

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SUPPLEMENT

TO

THE SECOND EDITION

OF

THE UNIVERSAL CAMBIST;

BEING

An Exposition

OF THE

WEIGHTS, MEASURES, AND MONIES,

OF

THE EAST INDIES,

DEDUCED FROM

A SERIES OF EXPERIMENTS ON ATTESTED STANDARDS,

VERIFIED BY OFFICIAL AUTHORITIES;

INCLUDING

MANY OTHER IMPORTANT DOCUMENTS RELATING TO

Oriental Commerce.

TO

THE HONOURABLE

THE COURT OF DIRECTORS

OF THE

East India Company,

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A Court

WHOSE ADMINISTRATION HAS BEEN EMINENTLY DISTINGUISHED
FOR WISDOM, JUSTICE, AND LIBERALITY;

THIS SUPPLEMENT ON INDIAN METROLOGY

(EXECUTED UNDER THEIR AUSPICES)

IS INSCRIBED,

WITH SENTIMENTS OF THE HIGHEST RESPECT FOR THEIR PRIVATE CHARACTERS,

AND OF ADMIRATION FOR THEIR PUBLIC SERVICES,

BY THEIR VERY FAITHFUL SERVANT,

THE AUTHOR.

Finsbury Square,
February 28, 1824.

SUPPLEMENT.

ON THE WEIGHTS, MEASURES, AND MONIES, OF THE EAST INDIES.

PRELIMINARY DOCUMENTS AND EXPLANATIONS.

THIS extensive Supplement has become necessary in consequence of a general Comparison of the Weights, Measures, and Monies of India having taken place after the Article "*East Indies*" was printed in the first Volume; for although it was drawn up with the greatest care, and with the best information that could be then obtained in London, as stated in page 96, yet it is materially deficient in respect to the number of places, which are more than doubled in this Supplement.

That Article, however, is generally correct as far as it extends, particularly the Account of the Three Presidencies, Bengal, Madras, and Bombay; which Account may therefore be considered a proper Introduction to the whole, and ought to be well understood before any further study of the subject is entered upon.

It should have been premised, that the Circular Order issued by his Majesty's Government in 1818, directing all British Consuls abroad to send home verified standards (see Preface, page x), did not extend to the East Indies, and hence the deficiency above mentioned. With a view, therefore, to remedy this want, and to co-operate with government in completing the general Comparison, the Court of Directors, in 1821, issued the following Order.

Extract of the Public Letter from the Court of Directors to Bengal, dated London, 10th of January, 1821.

"*A commission having been lately issued by the Crown, to consider the subject of Weights and Measures, we are desirous of being enabled to assist the pending enquiry, by the fullest information which can be procured concerning Weights and Measures, in all countries with which England has commercial relations in Asia.*

"*For this purpose we forward a number in the packet, the draft of a Letter of Instructions, which we desire you will issue to commercial residents, collectors of customs, and such other persons under your authority, as may be thought competent to furnish the required information. You will communicate the result to us without delay, forwarding from time to time the information received in pursuance of those instructions, until the enquiry be completed.*"

Draft of Instructions to be issued to Commercial Residents, Collectors of Customs, and other Public Officers, referred to in the foregoing Extract.

You are to procure and forward two sets of models, being accurate counterparts of the standard Weights and Measures in use at your Station, for weighing and measuring goods and merchandize of every description.

In places where different denominations and standards of Weight or Measure are employed for particular articles, distinctly from ordinary commodities, separate counterparts of the various Weights and Measures are to be furnished.

Should Weights or Measures in use at places within your authority vary from those established at your principal station, you will likewise procure distinct sets of Weights or Measures so differing.

It will not be necessary that the sets of models should comprehend subdivisions, nor multiples of the principal Weight or Measure of each series. A model of one in a series will suffice; and a convenient one to be selected for Weights may be that which is nearest to the pound (as the seer and the catty, where maunds and peculs are in use respectively); and in like manner for Measures of length, one that is nearest to the cubit or the ell; and for Measures of capacity, one that is next to the pint or the quart.

To every model should be annexed a specification of the usual subdivisions, or smaller Weights employed as aliquot parts, as well as of the greater Weights used as multiples of that which the model represents. Thus an explanatory note should be annexed to the seer, specifying the number of chattacks contained in it, or other customary divisions; and likewise the number of seers contained in the maund, and of maunds in the candy (where such greater weight also is in use).

Brass, copper, or tutanag are considered to be fit materials of which the models may be made.

The accuracy of the models is to be carefully verified and regularly attested by competent persons.

One set of the models is designed for immediate transmission to England, the other to be retained at the Presidency for subsequent and eventual transmission, as a duplicate in case of miscarriage of the first dispatch. The two sets accordingly are to be assorted and separately packed.

If models of Measures of capacity for meting corn or liquids cannot be provided and forwarded without too great inconvenience, the desired information may be supplied by a careful ascertainment and report of the liquid contents, as corresponding either to a known standard of the like sort, or to cubic inches. Accurate models would however be more satisfactory.

In an explanatory letter accompanying the transmission of the models, you will add such information as you may possess, or can procure, upon the general object of these instructions, with any observations which may occur to you, as throwing light upon the subject. (1821.)

In obedience to the foregoing Circular, numerous packages, containing the required standards, with their specifications, and other explanatory documents, were in due time transmitted to the Court of Directors in London ; and, as they arrived, were delivered to the Author of this work for examination and comparison, as intimated by the following letter from the Secretary of the East India Company.

East India House,
2d August, 1822.

Sir,

It having been suggested to the Court of Directors of the East India Company, that several specimens of Weights and Measures, which have been, and are expected to be received from the different Settlements in the East Indies, may be entrusted to you for examination and comparison, I am directed, in accordance with that suggestion, to acquaint you that such of the said specimens as have been received will be delivered to you upon your making application at this house for that purpose, and upon your giving a receipt for the same, specifying that they are the property of the East India Company, and will be returned when required.

A similar communication will be made to you upon the arrival of any further articles of the same description.

I am, Sir,
Your most obedient humble Servant,

To Dr. Kelly.

JOSEPH DART, Sec.

Such were the orders and regulations of the Court of Directors, in pursuance of which all the standards received from India (amounting to more than 300 in number) have been compared with English standards by the Author of this work, or under his immediate superintendence ; and afterwards the principal weights were examined, and their contents verified at the Royal Mint, by *Robert Bingley*, Esq. F. R. S. the King's Assay-Master, whose important assistance throughout the work has so essentially promoted its accuracy. (See Pref. p. xii.)

The results of all these comparisons are comprised in the present Supplement, together with much new and useful information on commercial practice, as communicated in the various dispatches from India, which accompanied the standards.

This Supplement contains the result of another extensive operation, which was also considered a desideratum, namely, a general Assay of the Coins of India. It was executed at the Bombay Mint, in 1821, by *B. Noton*, Esq. Assay-Master to the Company.

This Table of Assays is of peculiar importance to the present undertaking, as it not only shews the Par of Exchange throughout India, but also the weight of each Rupee, which is generally considered an aliquot part of the Seer or other standard of the place to which such Coin belongs. The Report is, therefore, made a leading article here; and with a view to render it still more extensively useful, two columns are added. One is a numerical notation of the Coins, for the convenience of reference; and the other shews their sterling value, according to the Mint price in England, from which their value at any other price may be readily computed. (See Note, p. 332.)

As the Table contains no account of the divisions of the Rupee, this want is supplied in the subsequent pages, by mentioning the Presidency to which each Settlement is subject or subordinate; for it may be inferred, that the Rupee of each place is divided according to the practice of its Presidency.* It will be seen by a reference to the article *East Indies*, vol. 1, that in Bengal the Rupee is divided into 16 Annas, and each Anna into 12 Pice; and that a similar system has been of late adopted at Madras; but at Bombay and most of its subordinates, it is divided into 4 Quarters, and each Quarter into 100 Reas.

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* This account of the Presidencies to which the Settlements are subordinate (now published for the first time) has been supplied for this work by *William Wright*, Esq. Chief Auditor of Indian Accounts: and here the Author would wish also to acknowledge the able assistance which he has received from many other officers of the Company, but the list of names would be too numerous. He cannot, however, omit to mention one distinguished character, from whose writings and communications he has obtained much important information. This is *General Sir John Malcolm*, G.C.B. K.L.S. whose valuable Work on *Central India* contains a very clear Specification of the Weights, Measures, and Exchanges, of nearly twenty Cities in the newly-acquired Territories of *Malwa* and its surrounding Districts.

The Dispatches from the Civil Officers in India to the Court of Directors, in answer to the Circular of 1821, have furnished matter for more than 100 *new* places for this Supplement, that is to say, places on the Metrology of which nothing had been previously published in the English language. This great accession of commercial knowledge is further augmented and improved by the following Table of Assays.

ASSAY REPORT;

Shewing the Mint Standards of Bombay, Calcutta, Madras, and England; and the Weight, Purity, and intrinsic Value, by Assay, of all the Coins, either current in the Honourable Company's Territories under the Presidency of Bombay, or imported as Bullion.—August 4th, 1821.

	NAMES OF COINS.	ASSAY.			Value of 100 in Bombay Currency.	Sterling Value.	REMARKS.
	GOLD.	Weight.	Touch. *	Pure Metal.			
		Grs. dec.	Per Cent. dec.	Grs. dec.	Rs. dec.	S. dec.	
1	Bombay Mohur	179.—	92.	164.68	1500.—	29.18	New standard, 1 part of gold being worth 15 of silver.
2	Calcutta do. (New) ..	204.71	91.66	187.65	1709.2233	33.37	
3	Madras do. (New) ..	180.—	91.66	165.—	1502.914	29.10	
4	English Guinea	129.50	91.66	118.70	1081.187	21.00	English stand. See p. 157, vol. ii.
5	Venetian or Seguin ..	53.—	99.25	52.60	479.011	9.31	Full weight, 54 grains.
6	Gubber or Dutch Ducat	53.25	98.25	52.31	476.500	9.26	Do. 53¼ do.
7	Joaneese of Portugal ..	220.75	91.50	201.98	1839.805	35.74	Do. 222½ do.
8	Persian Toman	73.50	97.25	71.47	651.06	12.65	Current in Pers. & Arab. Gulfs.
9	New Ekairee Pagoda	52.85	84.—	44.39	404.390	7.85	Cur. in the Mysore and Carnatic.
10	Old Do..... do. ..	52.62	84.38	44.40	404.452	7.86	Nearly out of circulation.
11	Bhol Do..... do. ..	52.69	84.50	44.52	405.50	7.79	Curr. in the S. Mahratta country.
12	Bhoolpuddee do. ..	52.77	85.—	44.85	408.585	7.93	Nearly the same coin as the last.
13	Bahandry .. do. ..	52.72	84.50	44.54	405.768	7.88	Struck by Hyder Ally.
14	Funokee .... do. ..	52.80	84.63	44.68	407.037	7.91	Struck by the Sultan.
15	Guddapuddee do. ..	50.97	76.38	38.93	354.625	6.89	These five coins, as well as the six preceding ones, are received at the Poona treasury at a variable rate of exchange.
16	Fudduck ....do. ..	50.77	76.38	38.77	353.234	6.86	
17	Kudvanajee ..do. ..	50.75	76.38	38.76	353.095	6.86	
18	Hallee Sicca ..do. ..	50.90	76.38	38.87	354.139	6.88	
19	Modapuddee ..do. ..	50.55	75.25	38.038	346.500	6.73	
20	Rajaram Ekaire do. ..	52.80	84.13	44.42	404.632	7.86	Of limited circulation.
21	Bhatoree ....do. ..	50.50	75.—	37.87	345.003	6.70	
22	Tomancien ..do.½..	26.12	84.63	22.105	201.359	3.91	
23	Bangaloree ..do. ..	52.82	84.25	44.50	405.363	7.87	Struck by Hyder Ally.
24	Mahomed Shaie do. ..	51.50	78.75	40.55	369.431	7.17	Of limited circulation.
25	Ventrataputkee do. ..	51.50	76.38	39.33	358.313	7.04	
26	Herponhilee ..do. ..	50.75	77.50	39.33	358.272	7.61	
27	Pavan Tharokee do. ..	52.89	84.38	44.62	406.496	7.89	Current in the Southern Mahratta country.
28	Nakar Tharokee do. ..	52.90	85.13	45.03	410.186	7.97	
29	Garava Tharokeedo. ..	53 85	85.25	45.18	411.543	7.99	
30	Bhut Padee ..do. ..	52.90	84.75	44.83	408.355	7.93	
31	Baha Tapee ..do. ..	54.—	84.75	45.76	416.853	8.09	
32	Joona Elaye ..do. ..	52.50	84.38	44.29	403.500	7.84	
33	Navee Ekee ..do. ..	53.—	84.50	44.78	407.92	7.92	
34	Centeroy Fanams ..	5.82	59.—	3.43	31.278	0.61	
35	Sultana Fanams ..	5.87	58.—	3.40	31.012	0.60	

* The Touch is a decimal notation of the fineness. Thus the Bombay Mohur contains 92 parts of pure gold and 8 of alloy. Hence the Touch, multiplied by the Weight, gives the pure metal. (See p. 67, vol. 1.)

ASSAY REPORT *continued.*

	NAMES OF COINS. SILVER.	ASSAY. Weight. Grs. dec.	Touch. Per Cent dec.	Pure Metal. Grs. dec.	Value of 100 in Bombay Currency. * Rs. dec.	Sterling Value. D. dec.	REMARKS.
36	Bombay Rupee	179.—	92.—	164.68	100.	24.48	} Mint Standard.
37	Calcutta do.	191.916	91.66	175.923	106.827	26.15	
38	Madras do.	180.—	91.66	165.—	100.194	24.52	
39	English Crown	436.36	92.5	403.63	245.101	60.00	
40	Spanish Dollar	415.02	89.38	370.95	225.25	55.14	} Imported as bullion.
41	German Crown	430.25	83.38	358.74	217.84	53.32	} Generally current.
42	Ankosee Rupee	172.50	91.75	158.26	96.105	23.52	Standard coin at Poona, &c. &c.
43	Chandore .. do.	172.25	91.50	157.608	95.705	23.17	Standard coin of Candeish.
44	Thoora .. .. do.	170.—	91.50	155.55	94.425	23.12	Current in Candeish.
45	Jeereeputka .. do.	171.6	91.25	156.58	95.083	23.27	Curr. in the Northern Concan, &c.
46	Belapooree .. do.	171.82	85.—	146.04	88.685	21.71	Curr. at Poona, Ahmednuggur, &c.
47	Batoree .. .. do.	171.3	87.—	149.03	90.495	22.15	Current in the Deccan.
48	Shree Sicca .. do.	172.—	91.50	157.38	95.567	23.40	} Coined formerly at Poona.
49	Hallee Sicca .. do.	174.75	96.25	168.19	102.128	24.98	
50	Waubgaum .. do.	172.55	91.50	157.88	95.872	23.46	Coined at Waubgaum.
51	Purkee .. .. do.	178.88	94.25	168.59	102.376	25.06	Current in Candeish.
52	Chambagoondee .. do.	171.—	84.75	144.92	88.—	21.51	Coined as described.
53	Mullarshie do.	172.3	89.—	153.34	93.118	22.79	Do. & curr. in the Dooab & Malwa.
54	Shapooree .. .. do.	174.—	87.—	151.38	91.924	22.50	} Coined as described.
55	Kittoor Shapooree do.	174.—	86.25	150.07	91.013	22.30	
56	Ougien, ... do.	173.—	90.25	156.13	94.—	23.20	} Do. current throughout Malwa.
57	Indore .. .. do.	174.50	92.50	161.41	98.—	23.99	
58	Govind Buksh .. do.	171.16	78.—	133.50	81.066	19.84	Coined at Aurungabad.
59	Nagpore .. .. do.	166.73	86.5	144.22	87.575	21.43	Coined as described.
60	Broach .. .. do.	177.5	87.62	155.52	94.440	23.12	Current at Broach, Surat, &c.
61	Old Broach .. do.	177.06	94.25	166.88	101.335	24.80	Coined formerly at Broach.
62	Cambay .. .. do.	179.50	81.88	146.97	89.247	21.84	Curr. in Nabob's distr. Kaira, &c.
63	Babasye .. .. do.	177.—	84.88	150.75	91.540	22.40	} Coined at Baroda; also current at Kaira.
64	Walkersye .. do.	177.39	87.75	155.65	94.532	24.12	
65	Ashasye .. .. do.	176.50	86.5	152.68	92.705	22.69	
66	Mukunsye .. .. do.	176.62	87.5	154.54	93.842	22.97	
67	Wullubsye .. do.	175.56	85.—	150.07	91.217	22.30	
68	Ahmedabad Sicca do.	179.92	84.—	151.13	91.772	22.46	Coined as described.
69	New do. do. do.	180.75	85.—	153.63	93.292	22.83	Current at Anjar, Cutch, &c.
70	Hallee do. do. do.	174.77	96.25	168.21	102.147	25.00	Coined & only cur. at Ahmedabad.
71	Cutch Kowrie .. do.	72.15	60.75	43.83	26.615	6.51	Coined at Anjar, & cur. in the Cutch
72	Porebunder do. .. do.	74.50	69.75	51.96	31.553	7.72	Coined as described.
73	Persian .. .. do.	159.12	94.50	150.36	91.309	22.35	} Imported as bullion, and current in the Persian Gulf.
74	New Persian .. do.	141.3	94.50	133.52	81.083	21.67	

* This column is computed by dividing the number of pure grains in 100 Rupees of any place by the number in one Bombay Rupee. Thus it is found that 100 Rupees of Calcutta are worth 106.827 of Bombay (see No. 37). By a similar operation the Par of Exchange between any other two places in the Table may be determined.

ASSAY REPORT *continued.*

	NAMES OF COINS.	ASSAY.			Value of 100 in Bombay Currency.	Sterling Value. *	REMARKS.
	SILVER CONTINUED.	Weight.	Touch.	Pure Metal.			
		Grs. dec.	per Cent dec.	Grs. dec.	Rs. dec.	D. dec.	
75	Goa Rupee	168.50	86.—	144.91	87.995	21.54	Current in the Persian Gulf, &c.
76	Mysore .. do.	173.56	94.25	163.58	99.390	24.31	Coined formerly at Mysore.
77	Mulkapoor.. .. do.	173.2	71.75	124.27	75.461	18.44	Coined as described.
78	Meritch Hookaree do.	172.6	84.—	144.98	88.039	21.54	Do.
79	Narrainpet .. do.	172.5	80.50	138.86	84.321	20.64	A species of Hydrabad Rupee.
80	Timbourne .. do	171.3	85.50	146.46	88.936	21.77	
81	Waye Sicca .. do.	171.8	89.50	153.76	92.760	22.85	Coined and circulated as described.
82	Jumkundee .. do.	175.—	92.—	161.—	97.765	23.93	
83	Berhanpoore .. do.	178.8	94.75	169.41	102.87	25.19	
84	Phoolsheree .. do.	171.7	91.50	157.10	95.397	23.35	A species of Ankosee Rupee.
85	Pertabghur .. do.	170.40	87.25	148.67	90.278	22.09	
86	Emaumee .. do.	175.—	95.50	167.12	101.484	24.83	Coined as described.
87	Rajah Pondicherry do	176.16	94.75	166.91	101.354	24.81	Formerly struck at the Mysore.
88	Punlee old .. do.	170.60	63.—	107.47	65.264	15.97	Of very little currency.
89	Nepanee Perkanee do.	173.—	75.75	131.—	79.548	19.47	Curr. in district of Padshapoor, &c.
90	Semboo do. do.	172.75	79.75	137.76	83.658	20.47	Curr. in the S. Mahratta country.
91	Moodhole do. do.	173.—	57.50	99.47	60.405	14.78	An old coin of limited circulation.
92	Old Semboo do. do.	174.—	89.75	156.16	94.829	23.21	Do.
93	Toragull Nelkantee do	170.—	62.—	105.4	64.—	15.66	Do.
94	Tokoshaie .. do.	173.16	94.—	162.77	98.84	24.19	
95	Jyenuggree .. do.	172.68	90.—	155.41	94.37	23.10	Current in the Ahmednuggur districts.
96	Mannashic .. do.	169.50	90.—	152.55	92.634	22.67	
97	Delhi .. .. do.	174.50	97.65	170.57	103.578	25.35	
98	Perkanee Newest do.	177.9	88.75	157.88	95.875	23.46	Coined in the Sawant States.
99	Spanish Indept. Dollar	420.5	89.50	376.34	228.532	55.94	Coined at Chili in 1817.

Bombay Assay Office,
Aug. 4, 1821.

(Errors excepted).

B. NOTON,
ASSAY MASTER.

*** The above Table has been approved and acted upon by Government, and is published with the following additional Signature.

By Order of the Honourable the Governor in Council,

J. FARISH,
SEC. TO GOVERNMENT.

* The sterling value of any Coin is found by multiplying the pure grains, if gold, by 2.1238; and, if silver, by ,14364. The product in either case will be in pence sterling.

EXPOSITION

Of the Weights, Measures, and Monies, of the principal trading Places in India, &c.

Note.—The places already described in this Work are referred to in the Supplement, and are enlarged or corrected where necessary.

*** In the following pages, gr. means Grains Troy, and lb. oz. dr. Pounds, Ounces, and Drams Avoirdupois. Also; throughout the work, 1lb.=7000 gr.; 1 oz.=437½ gr.; and 1 dr.=27$\frac{11}{32}$ gr. Troy. (See p. 220, vol. 1).

ACHEEN, in Sumatra. See vol. 1, p. 97.

AHMEDABAD,

A City in the province of Gujrat, under the Presidency of Bombay.

For the MONIES of Ahmedabad, see *Assay Report*, No. 68, 69, and 70, p. 330. *

Gold and Silver Weight.

			gr.
	1 Ruttee	=	2.015
3 Ruttees	= 1 Val	=	6.045
32 Vals	= 1 Tola	=	193.440

Commercial Weight.

		lb.	oz.	dr.
	1 Seer =	1	0	14½
40 Seers	= 1 Maund =	42	4	13

The Seer is divided into halves, quarters, eighths, &c.

Long Measure.

	Eng. Inches.
Guz for Cloth.....	27¼
Ditto for Velvet....	34¼
Ditto for Artificers..	23⅓

Grain and liquids in this part of India are sold by weight, and this practice is very general throughout Asia.

AHMEDNUGGUR,

A City in the province of Aurungabad, under the Presidency of Bombay.

For the Monies of Ahmednuggur, see *Assay Report*, No. 94 to 97, p. 333.

Gold and Silver Weight.

			gr.
	1 Gonje	=	1.95
2 Gonjes	= 1 Wall	=	3.9
4 Walls	= 1 Massa	=	15.7
12 Massas	= 1 Tola	=	188.4
24 Tolas	= 1 Seer	=	4521.6

Commercial Weight.

		lb.	oz.	dr.
	1 Chittack =	0	1	15½
16 Chittacks	= 1 Seer =	1	15	8
40 Seers	= 1 Maund =	78	15	12
3 Maunds	= 1 Pullah =	236	15	4
20 Maunds	= 1 Candy =	1577	2	4

Dry Measure.

			lb.	oz.	dr.
18 Tanks	= 1 Pao	=	0	10	13
4 Paos	= 1 Seer	=	2	11	6
2 Seers	= 1 Adholee	=	5	6	12
2 Adholees	= 1 Pylee	=	10	13	8
12 Pylees	= 1 Maund	=	130	2	0
2½ Maunds	= 1 Pullah	=	325	5	0
8 Pullahs	= 1 Candy	=	2602	8	0

* It should be observed, that in the foregoing Table the Silver Coins are computed at 66d. per oz. the new Mint price in England; whereas, in all other parts of this work, the old price is used, viz. 62d. per oz. (See p. 217, vol. 1). These rates may be converted reciprocally into each other, by the proportion of 31 to 33; and the value of the Indian Coins, at any other price, may be found by the following Rule: *multiply the value in the column by the market price, and divide by the mint price.* Thus, to find the worth of the Bombay Rupee (No. 36) at 60d. per ounce standard, 24,48d.×60÷66=22¼d,=the required value.

AHMEDNUGGUR, *continued.*

The Seer of Weight equals 80 Ankosee Rupees, in which there are 73⅓ Tolas, gold weight. (See *Assay Report*, No. 42).

The Seer of Capacity is calculated on the grain called Bajree, of which the Seer weighs 110 Ankosee Rupees.

Oil, sugar, ghee, areca nuts, cocoa nuts, indigo, turmeric, and many other articles, are sold by weight; but there are measures formed for them, which assimilate with the Seer of 80 Rupees.

The Seer of saffron, silk, gold thread, and cochineal, equals 72 Tolas, Goldsmiths' weight = 13550 gr. Troy, or 1 lb. 12 oz. 11 dr. Avoirdupois weight.

Long Measure.

			Eng. Inches.
14 Tussoos	= 1 Hath	=	14
1¾ Hath	= 1 Guz	=	24½

ALLAHABAD, a City in the Province of the same name, under the Presidency of Bengal. See vol. 1, p. 122.

AMBOYNA. See vol. 1, p. 97 and 122.

AMOD, OR AHMOODE,

A Town in the Province of Gujrat, under the Presidency of Bombay.

The Monies of Amod are the same as those of Broach, which see.

Commercial Weights.

			lb.	oz.	dr.
40 Broach Rupees	= 1 Market Seer	=	1	0	3½
40 Seers	= 1 Maund	=	40	8	12
20 Maunds	= 1 Candy	=	810	15	0

For Dry Goods, Kuppas, and Grains.

41 Broach Rps.	= 1 Pergunnah Seer	=	1	0	10
40 Seers	= 1 Maund	=	41	9	5
20 Maunds	= 1 Candy	=	831	10	4

AMOD, *continued.*

Commercial Weights.

For Cotton.

			lb.	oz.	dr.
41 Broach Rupees	= 1 Seer	=	1	0	10
42 Seers	= 1 Maund	=	43	10	10
20 Maunds	= 1 Candy	=	873	4	13

Long Measure or Guz = 27⅛ English Inches.

ANJAR,

A District under the Presidency of Bombay.

For the Monies of this District, see *Assay Report*, No. 69 and 71.

Gold and Silver Weight.

			Gr.
	1 Vall	=	5.6
16 Valls	= 1 Guddiana	=	89.5

Commercial Weight.

				lb.	oz.	dr.
	1 Dokra	=	127.5 gr.			
36 Dokra	= 1 Seer	=		0	10	7¼
10 Seers	= 1 Dus Serrah	=		6	8	14
40 Seers	= 1 Maund	=		27	3	8

Cotton and iron are sold wholesale by the Maund of 48 Seers, which equals 31 lb. 7 oz. 9 dr.

Dry Measure.

			Cubic Inches.
	1 Pallee	=	59.3
8 Pallees	= 1 Mapp	=	474.4
4 Mapps	= 1 Shye	=	1897.6
16 Shyes	= 1 Culsey	=	30361.6 *

Long Measure.

The Guz of 34 Country Inches contains 26.4 English Inches.

* The contents of such Measures of Capacity as are here given in cubic inches, may be determined in gallons, by dividing by 231 for Wine Measure, and 268.8 for Corn Measure. Thus 30361.6 the cubic inches of the Culsey, will be found to equal 131.43 Wine gallons, or 112.9 Corn gallons.

ANJENGO. See vol. 1, p. 98 and 122.

ANKOLA. See *Ahmednuggur*, except for the Seer of Capacity, which is here 4 oz. lighter.

AUMMOODH,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

	lb.	oz.	dr.
The Seer for cotton	= 1	8	0
The Seer for grain and all other goods	2	0	8

For further particulars, see *Calpee*.

AURUNGABUNDAR. See vol. 1, p. 99 and 122.

AYER BONGHYE, in the Island of Sumatra. See *Natal*.

BAGULKOTA,

A Pettah or small District in the Dooab, under the Presidency of Bombay.

For the Monies of this place, see *Assay Report*, No. 53.

Weights.

The Cutcha Seer is used for groceries, oils, &c. It weighs 20 Madras Rupees, and therefore equals 8 oz. 3½ dr.

Grain is sold by the Pucca Seer, which weighs 133 Madras Rupees, and equals 3 lb. 6 oz. 11½ dr. It measures 116½ Cubic Inches.

Long Measure.

24 Tussoos make 1 Guz, = 32⅞ English inches.

The Hath, for measuring cloths and turbands, answers to 19¼ English Inches.

BAIRSEEAH,

A Town in Central India, under the Presidency of Bengal.

BAIRSEEAH, *continued.*

Weights.

			lb.	oz.	dr.
80 Bhopal Rupees	= 1 Seer	=	1	14	13
5 Seers	= 1 Pusseree	=	9	10	3½
8 Pusserees	= 1 Maund	=	77	1	12
4 Maunds	= 1 Maunee	=	308	7	0
100 Maunees	= 1 Maniasa	=	30843	12	0

For further particulars, see *Malwa*.

BALLASORE. See vol. 1, p. 122.

BANDA. See vol. 1, p. 99 and 122.

BANJAR MASSIN. See vol. 1, p. 99 and 122.

BANSWARRA. See *Malwa*.

BANTAM. See vol. 1, p. 100, 122, and 124.

BARDOLER,

A District of Surat, under the Presidency of Bombay.

Commercial Weight.

The Maund of Bardoler contains 39¼ Seers and 2 Pice of Surat = 37 lb. 4 oz. 4¼ dr.

For further particulars, see *Surat*, vol. 1, p. 119 and 123, and also in this Supplement.

BARODA,

A Pergunnah in the District of Broach, under the Presidency of Bombay.

For the Monies, see *Assay Report*, No. 63 to 67.

Commercial Weight.

Pergunnah Seer.

			lb.	oz.	dr.
42 Babashey Rs.	= 1 Pergunnah Seer	=	1	1	2
42 Seers	= 1 Maund	=	44	15	4
20 Maunds	= 1 Candy	=	899	1	0

Town Seer.

41 Babashey Rupees	= 1 Town Seer	=	1	0	11¼
42 Seers	= 1 Maund	=	43	13	15
20 Maunds	= 1 Candy	=	877	7	0

BARODA, *continued.*

Seer for Sea Sanum.

		lb.	oz.	dr.
42 Babashey Rupees	= 1 Seer =	1	0	15.8
40 Seers	= 1 Maund =	42	7	10.8
20 Maunds	= 1 Candy =	849	9	9

The Seer for oil is the Pergunnah weight.

Long Measure.

	Eng. Inches.
24 Tussoos = 1 Guz. =	27⅛

BATAVIA. See vol. 1, p. 100, 122, and 124.

BAULEAH,

Under the Presidency of Bengal.

Commercial Weight.

1 Chittack = 670¼ gr. Troy.
16 Chittacks = 1 Seer = 1lb. 8oz. 10dr. Avoir.

Besides the above Seer of 60 Sicca Rupees weight, there is a Seer of 80 Sicca Rupees weight, which equals 2lb. 0 oz. 11 dr.

The Sicca Rupee weight of Bengal is reckoned at 179⅔ English grains, but it varies two or three grains, more or less. The contents here given are those of the actual weights transmitted.

Measure of Capacity for Liquids.

The Seer of 60 Sicca weight equals 1 lb. 8 oz. 10 dr.

The Cubit is 18 English Inches.

BEEMMAR,

In the District of Calpee, under the Presidency of Bengal.

Weights.

Three different Seers have been received from this place, viz.

	lb.	oz.	dr.
1. Khaus Seer =	1	7	2½
2. Omeree Seer =	1	11	15
3. Channee Seer =	2	0	10

BEEMMAR, *continued.*

The Long Measure here equals 40⅜ English Inches.

For further particulars, see *Calpee.*

BELGAM,

A Pettah in the Dooab, under the Presidency of Bombay.

For the Monies of this place, see *Assay Report*, No. 55.

Commercial Weight.

The Cutcha Seer, for weighing oils and groceries, equals 20¼ Madras Rupees = 8 oz. 5 dr.

The Pucca Seer for grain, salt, &c. when filled with nine different kinds of grain, equals 106¼ Madras Rupees = 2 lb. 11 oz. 8 dr. and measures 93.1 Cubic Inches. See note to *Darwar.*

Long Measure.

	Eng. Inches.
The Guz of 24 Tussoos, for goods not sold by the piece ---------- }	=32⅞
The Hath, for cloths and turbands	=19¼

BENARES,

A City in the Province of Allahabad, under the Presidency of Bengal.

For the Rupee of Benares, see vol. i, p. 88.

Weights.

Three different Seers have been transmitted from this city, viz.

	lb.	oz.	dr.
The Seer of 105 Sicca weight =	2	10	0
Ditto 103 ditto =	2	9	2
Ditto 96 ditto =	2	6	7

The Tola weighs 215 grains.

Long Measure.

	Eng. Inches.
The Tailors' Yard	= 33
The Weavers' ditto	= 42½
The Cloth Merchants' ditto	= 37⅛
The Architects' ditto	= 25⅓

BENCOOLEN,

In the Island of Sumatra.

For the mode of keeping Accounts here, and the Commercial Weights, see vol. 1, p. 101.

Gold and Silver Weight.

		oz.	dwt.	gr.
	1 Coondee =	0	0	1.772
30 Coondees =	1 Keping =	0	2	5.166
8 Kepings =	1 Ringit =	0	17	17.333
1½ Ringit =	1 Tael =	1	6	14.

Measures of Capacity.

		Cubic Inches.
4 Chupahs =	1 Koolah =	252
800 Koolahs =	1 Coyan =	201600

BENDER ABASSI. See *Gamron*, vol. 1, p. 151.

BENGAL. For the Monies, Weights, and Measures of this Presidency, see the article *Calcutta*, vol. 1, p. 87; and for the Exchanges, see vol. 2, p. 103. See also the *Assay Report* in this Supplement, Nos. 2 and 37.

BETELFAGUI. See vol. 1, p. 40 and 122.

BHEDECK,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Weights.

Three Seers have been received from this place, viz.

	lb.	oz.	dr.
The Khaus Seer, for goods in general =	2	1	15
The Roypore Seer for grain (wholesale) =	2	8	8
Ditto for grain (retail) =	2	6	0

The Long Measure = 38½ English Inches.

BHEDH,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Weights.

	lb.	oz.	dr.
The Seer (retail) =	1	14	14
The Seer for grain (wholesale) =	2	11	3

The Long Measure contains 36¼ English Inches.

BHILSA,

A City in Central India, under the Presidency of Bengal.

Coin.

The Bhilsa Rupee is computed here to weigh 167.5 grains. It contains 138.7 grains of pure metal, and is therefore worth about 20d. sterling.

Weights.

		lb.	oz.	dr.
80 Bhilsa Rupees =	1 Seer =	1	14	10
6 Seers =	1 Pusseree =	11	7	12
8 Pusserees =	1 Maund =	91	14	0
30 Pusserees, or 3¾ Maunds =	1 Maunee =	344	8	8
100 Maunees =	1 Maniasa =	34453	2	0

For dry goods and other articles, the Pusseree consists of 5 Seers only.

For other particulars, see *Malwa*.

BHOOTSUR,

A Pergunnah near Surat, under the Presidency of Bombay.

Weights.

The Maund contains 40 Seers 8 Pice of Surat, and equals 37 lb. 12 oz. Avoirdupois.

Measures.

The only Measure of Capacity is the Pauny Seree of 5 Seers, that is, as much batty or rice in the husk as will, if delivered by weight, amount to

BHOOTSUR, *continued.*

that quantity, and which equals 4 lb. 11 oz. Avoirdupois.

For further particulars, see *Surat*, vol. 1, p. 119 and 123; and also in this Supplement.

BHOPAL,

A City in Malwa, under the Presidency of Bengal.

Coin.

The Rupee weighs 168.75 grains. It contains 150 grains of pure metal, and is worth 21¼d. sterling.

Weights.

			lb.	oz.	dr.
80 Bhopal Rupees	= 1 Seer	=	1	14	13¾
6½ Seers	= 1 Pusseree	=	12	8	9
40 Pusserees	= 1 Maunee	=	501	6	8
100 Maunees	= 1 Maniasa	=	50140	10	0

For further information, see *Malwa.*

BIRMAN EMPIRE. See *Rangoon*, vol. 1, p. 115.

BOHARE,

A Pergunnah near Surat, under the Presidency of Bombay.

Weights.

The Maund contains 41½ Seers 4 Pice of Surat, and equals 39 lb. 1 oz. Avoirdupois.

For further particulars, see *Surat.*

BOMBAY.

An Account of the Monies, Weights, and Measures of this Presidency will be found in vol. 1, p. 93 and 122; but as the Dispatches, transmitted with the Standards to the Court of Directors, contain some additional matter, and are in particulars more accurate, their contents are here inserted, with the results of several experiments.

BOMBAY, *continued.*

For the Coins of Bombay, &c. see *Assay Report*, p. 331.

Gold and Silver Weight.

			gr.
	1 Wall	=	4.475
40 Walls	= 1 Tola	=	179

Pearl Weight.

			gr.
	1 Tucka	=	0.218
13¾ Tuckas	= 1 Ruttee	=	3
24 Ruttees	= 1 Tank	=	72

For a full account of the Weights and Mode of valuing Pearls, &c. see vol. 1, p. 95.

Commercial Weight.

			lb.	oz.	dr.
	1 Tank	=	0	0	2.488
72 Tanks	= 1 Seer	=	0	11	3.2
40 Seers	= 1 Maund	=	28	0	0

These weights are used for all heavy goods, excepting Salt.

Grain Measure.

			lb.	oz.	dr.
2 Tipprees	= 1 Seer	=	0	11	3.2
4 Seers	= 1 Paily	=	2	12	12.8
7 Pailies	= 1 Parah	=	19	9	9.6
8 Parahs	= 1 Candy	=	156	12	12.8

Batty is reckoned by the Morah of 25 Parahs.

Salt Measure.

			Cubic Inches.
10½ Adowlies	= 1 Parah	=	1607.61
100 Parahs	= 1 Anna	=	160761
16 Annas	= 1 Rash	=	2572176

The Anna weighs 2½ Tons, and the Rash 40 Tons.

BOMBAY, *continued.*

Liquor Measure.

(Spirits and Country Arrack.)

The Seer weighs 60 Bombay Rupees, and equals 1 lb. 8 oz. 8½ dr.; and 50 Seers make the Maund.

Long Measure.

		Eng. Inches.
16 Tussoos	= 1 Hath	= 18
24 Tussoos	= 1 Guz	= 27

All the foregoing Standards are likewise divided into halves, quarters, &c.

The Dispatch, containing the above statements, concludes with the following remark:—

"The preceding Weights and Measures are generally used in Bombay; but it occurs in mercantile transactions that calculations are made in Pounds, Maunds, and Surat Maunds, which two last weights are sometimes reckoned at 40, 40½, 41, 43¾, and 44 Seers; and sometimes in Surat Candies of 20, 21, and 22 Maunds."

BORNEO. See *Banjar Massin*, vol. 1, p. 99 and 122; and *Succadana*, p. 119.

BOURBON, ISLE OF. See *Mauritius*, vol. 1, p. 110.

BROACH,

A Town and District in the Province of Gujrat, Presidency of Bombay.

For the Monies, &c. see *Assay Report*, p. 330, Nos. 60 and 61.

Commercial Weights.

			lb.	oz.	dr.
40 Broach Rs. Wt.	= 1 Kuppas T. Seer	=	1	0	3½
40 Seers	= 1 Maund	=	40	8	12
20 Maunds	= 1 Candy	=	810	15	0

BROACH, *continued.*

The following Standards are used by Mupparahs, or Grain-Weighers.

			lb.	oz.	dr.
40½ Broach Rupees Wt.	= 1 Seer	=	1	0	5½
40 Seers	= 1 Maund	=	41	1	4
20 Maunds	= 1 Candy	=	821	9	0

Market and Pergunnah Seer for all sorts of Grain, except Sea Samum, which is sold by the Kuppas Town Seer first mentioned.

41 Broach Rupees Wt.	= 1 Seer	=	1	0	10
40 Seers	= 1 Maund	=	41	9	5
20 Maunds	= 1 Candy	=	831	10	14

Market and Pergunnah Seer, used for weighing Cotton only.

41 Broach Rupees Wt.	= 1 Seer	=	1	0	10
42 Seers	= 1 Maund	=	43	10	10
20 Maunds	= 1 Candy	=	873	4	3

Measures of Capacity.

The Seer for Oil and Sea Samum contains 31.87 Cubic Inches, or 0.138 of a Wine Gallon; and is the same as that used at Amod, Dehy, and Jumboosur.

For Castor Oil.

			lb.	oz.	dr.
40 Broach Rupees Wt.	= 1 Seer	=	1	0	3½
42 Seers	= 1 Maund	=	42	9	9½
20 Maunds	= 1 Candy	=	852	0	0

This Seer contains 33.03 Cubic Inches, or 0.143 of a Wine Gallon.

Long Measure.

		Eng. Inches.
24 Tussoos	= 1 Broach Zillah Guz	= 27¼

Another standard of Long Measure has been received from this district, called the Wusa, which contains 89.6 English Inches, and which is very extensively used in India in the measurement of land.

		Eng. Inches.
	1 Wiswusa	= 4.48
20 Wiswusas	= 1 Wusa	= 89.6
20 Square Wusas	= 1 Beega	= 2 Roods 2 Perch.

BUGWARA,

A Pergunnah near Surat, under the Presidency of Bombay.

Weights.

The Maund contains 38¾ Seers 6 Pice of Surat, and equals 36 lb. 8 oz. 5 dr.

The Pauny Seree of 5 Seers weight of batty or rice in the husk, contains 4 lb. 11 oz. Avoirdupois.

For other particulars, see *Surat*.

BULSAR,

A Pergunnah near Surat, under the Presidency of Bombay.

Weights.

The Maund contains 40½ Surat Seers, and equals 37 lb. 15 oz. 8 dr.

The Pauny Seree is the same as that used at Bugwara, which see, as also *Surat*.

BURGONG,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Weights.

	lb.	oz.	dr.
The Seer for goods in general =	2	10	4
The Seer for grain =	1	12	3

The *Long Measure*, called Guz, contains 42 English Inches.

BUSHIRE, IN PERSIA.

The following Weights and Measures were transmitted to the Court of Directors in 1822, by the Company's Resident at Bushire. The largest weight is the Maund Tabruze, which contains 720 Miscals, and has been found to weigh 53784 Troy Grains, or 7 lb. 10 oz. 15 dr. Avoirdupois. Hence the Miscal answers to 74.7 Troy Grains.

The Miscal (in some places called the Metical) is used in several countries, both in Asia and Africa, and varies from 72 to 75 English Grains. See vol. 2, p. 222.

The Maund Tabruze is divided into halves, quarters, eighths, and sixteenths; but the divisions which have been received do not all answer to their due proportions.

The Long Measures are the Half Guz Shaw, which equals 20 English Inches; and the Half Guz Shaw Bushire, which equals 18.4 English Inches. Thus 23 of the former = 25 of the latter.

BUSSORAH, IN ARABIA,

Has been already described in vol. 1, under the head *Bassora*; but the following information has been recently received from that place by the Court of Directors, and should therefore be given, as containing some additional matter.

Commercial Weight.

	lb.	oz.
1 Vakia =	4	13⅓
24 Vakias = 1 Bussorah Maund =	116	0

There is a smaller or *Attary* Maund, for the sale of indigo, spices, &c. which is reckoned at 28 lb. Avoirdupois, and is thus divided:

	lb.	oz.
1 Vakia =	1	2½
24 Vakias = 1 Maund Attary =	28	0

Long Measures.

Silks and Woollens are measured by the Aleppo Yard, which equals 26½ English Inches.

Cottons and linens are measured by the Hadeed, which contains 34⅓ English Inches.

The Bagdad Yard is also used for both purposes, and measures 31⅓ English Inches.

Articles usually measured by a standard of Capacity are here sold by weight.

CACHAO. See vol. 1, p. 102.

CALCUTTA. For the Monies, Weights, and Measures of this Presidency, see vol. 1, p. 87 and 122; and for the Exchanges, see vol. 2, p. 103. See also *Assay Report* in this Supplement, No. 2 and 37.

CALICUT. See vol. 1, p. 102 and 122.

CALPAR,

A Pergunnah near Surat, under the Presidency of Bombay.

Weights.

The Maund contains 39¼ Seers 2 Pice of Surat, and equals 37 lb. 5 oz. 4 dr.

The other Weights and Measures are the same as those of Surat.

CALPEE,

A Town and District in the Province of Agra, under the Presidency of Bengal.

General Division of Weights.

16 Chittacks = 1 Seer
40 Seers = 1 Maund

	lb.	oz.	dr.
The Seer for sugar, metals, and grain =	2	1	15
for ghee =	2	6	3
for cotton =	2	6	12
for grain wholesale =	2	7	5

Long Measure.

	Eng. Inches.
4 Paueens = 1 Girrah =	9½
16 Girrahs = 1 Guz =	40

CAMBAY. See vol. 1, p. 103 and 122.

CAMBODIA. See vol. 1, p. 103.

CANANOR. See *Tellicherry*, vol. 1, p. 120.

CANCAO. See vol. 1, p. 103.

CANTON. See *China*, vol. 1, p. 66.

CARWAR. See vol. 1, p. 103 and 122.

CELEBES, ISLE OF. See *Macassar*, vol. 1, p. 107 and 123.

CEYLON, ISLE OF. See vol. 1, p. 104, 105, and 122.

CHANADORE,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

Commercial Weight.

The Seer weighs 74 Ankosee Rupees and 10 Massas, and equals 1 lb. 13 oz. 8 dr.

Measure of Capacity.

The Seer weighs 95 Ankosee Rupees, and its divisions and multiples are as follow:—

		lb.	oz.	dr.
18 Tanks = 1 Pao Seer =		0	9	5½
4 Pao Seers = 1 Seer =		2	5	7
2 Seers = 1 Adholee =		4	10	14
2 Adholees = 1 Pylee =		9	5	13
16 Pylees = 1 Maund =		149	13	7
20 Maunds = 1 Candy =		2996	12	12

For other particulars, see *Ahmednuggur*.

CHINA. See vol. 1, p. 66 and 122; and also *Fort Marlborough* in this Supplement.

COCHIN. See vol. 1, p. 104 and 122.

COCHIN CHINA. See *Faifoe*, vol. 1, p. 105.

COLOMBO. See vol. 1, p. 105 and 122.

COMMERCOLLY,

In the District of Rajishy, under the Presidency of Bengal.

Weights.

Four different Seers have been transmitted from this Presidency, viz.

		lb.	oz.	dr.
The Seer for brass, copper, &c. of ..	58 Sicca Weight =	1	7	9
The Seer of	60 ditto =	1	8	8
The Seer, Factory Wt.	72 11 An. 7 Pi. =	1	13	13
The Seer of	78 ditto =	1	15	12

The above are the actual contents of the Seers received in London, which are lighter than the estimated weight by Rupees. Thus the first is $3\frac{1}{2}$, the second 2, the third $\frac{1}{4}$, and the fourth 3 Drams lighter.

Measures of Capacity.

The Rattan Seer, Dry Measure, and the Bamboo Chungah, Liquid Measure, should each weigh 60 Sicca Weight as above, and contain about $\frac{1}{5}$ of a Wine Gallon.

The *Long Measures* contain, one 24 and another 18 English Inches.

COOLPAHAR,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

	lb.	oz.	dr.
The Seer equals	3	1	$6\frac{1}{4}$
The Grain Measure weighs 2 Seers 15 Chittacks ..... =	5	15	$11\frac{1}{2}$

COSSIMBAZAR,

A Town in the Province of Bengal.

The following are the contents of the Weights received from this place :—

COSSIMBAZAR, *continued.*

	lb.	oz.	dr.
The Seer of 76 Sicca Weight =	1	15	$1\frac{1}{2}$
78 ditto =	1	15	$14\frac{1}{4}$
80 ditto =	2	0	12
82 10 An. =	2	1	14

The actual weight of the several Seers above stated is less than the estimated weight by Rupees. Thus the first three are each $1\frac{1}{2}$ Dram lighter, and the last Seer about $\frac{3}{4}$ of a Dram.

The *Liquid Measure* weighs 1 Seer of 80 Sicca weight, as above.

The *Long Measure*, called the Haut, = $19\frac{1}{4}$ English Inches.

DACCA, a city under the Presidency of Bengal. See vol. 1, p. 122.

DARWAR,

A Pettah in the Dooab, under the Presidency of Bombay.

The New Rupee of the Madras mint (for which see *Assay Report*, No. 38) is taken as the standard.

6 Shabee Pice on an average equal 5 Madras Rupees. Hence the Pice weighs 150 Troy Grains.

Commercial Weight.

The Cutcha Seer for weighing Oil and Spices, equals 20 Madras Rupees = 8 oz. $3\frac{1}{2}$ dr. It is divided into 72 Tanks, each containing 50 Grains Troy.

Grain and Salt Measure.

The Pucka Seer (sometimes called Pao) equals 116 Madras Rupees, when filled with nine kinds of grain mixed together. It weighs 2 lb. 15 oz. $11\frac{1}{2}$ dr.; and measures 101 Cubic Inches.*

4 Pucka Seers = 1 Pylee or Chittee = 11 lb. 14 oz. 14 dr.

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* The nine kinds of Grain usually mixed together in this part of India, in order to ascertain the weight of the Seer of Capacity, are Wheat, Toor, Hurburr, Rooltbee, Moony, Oored, Joowaree, Paddy, and Mudkee.

DARWAR, *continued.*

Liquid Measure.

4 Dhurra = 1 Mun
20 Muns = 1 Randy.

The Dhurra generally contains 12 Seers, but varies from 10 to 14.

Long Measure.

	Eng. Inches.
The Hath for Turbands and other Cotton Cloths	= 19⅜
The Guz for Broad Cloth, Chintz, &c.	= 32¼

DECKAN POONA,

A City in the Southern Mahratta Country, under the Presidency of Bombay.

For the different Rupees of this place, see *Assay Report*, Nos. 42, 46, 48, and 49.

Goldsmiths' Weight.

			Gr.
2 Whats	= 1 Goonj	=	1.995
2 Goonjees	= 1 Wall	=	3.99
4 Walls	= 1 Massa	=	15.97
12 Massas	= 1 Tolla	=	191.66
24 Tollas	= 1 Seer	=	4600.

Commercial Weight.

The Seer contains 72 Tanks or Tollas, and equals 80 Ankosee Rupees, or 1 lb. 15 oz. 8½ dr.

By this Seer articles of high price, such as silk, saffron, gold-thread, cochineal, spices, &c. are sold.

Ghee, areca-nuts, turmerick, cocoa-nuts, dates, &c. are sold by the Maund of 12½ Seers = 24 lb. 10 oz. 4½ dr.

Copper, brass, tin, pewter, and bell-metal are sold by the Maund of 14 Seers = 27 lb. 9 oz. 9⅓ dr.

Iron, lead, tobacco, salt-petre, brimstone, oil, and some other articles, are sold by the Pullah of 120 Seers = 236 lb. 9 oz. 2 dr.

Vegetables and fruits are sold by the Maund of 40 Seers; and choonam, charcoal, &c. by the Candy of 20 Maunds. The Dhurra is composed of 10 Seers = 19 lb. 11 oz. 6½ dr.

Two other Weights are also used here, viz. the Kucha Punchseery of 2½ Seers, and the Punchseery of 5 Seers.

Dry Measure.

			lb.	oz.	dr.
2 Adpaos or Rolhas	= 1 Pao Seer or Chipta	=	0	7	14
2 Pao Seers	= 1 Adseer or Ashwa..	=	0	15	12
2 Adseers	= 1 Seer or Chathwa	=	1	15	8½
2 Seers	= 1 Adholee	=	3	15	1
2 Adholees	= 1 Pylee	=	7	14	2
12 Pylees	= 1 Maund	=	94	9	8
2½ Maunds	= 1 Pullah	=	236	7	12
20 Maunds	= 1 Candy	=	1891	14	0

The Maund is sometimes reckoned at 16 Pylees = 126 lb. 2 oz. Avoirdupois.

There is also another Pullah of 120 Seers = 365 lb. 2 oz. 4 dr.

DEWASS,

A Town in the Province of Malwa, under the Presidency of Bengal.

For the value of the Ougein Rupee, which is current here, see *Assay Report*, No. 56.

Weights.

			lb.	oz.	dr.
80 Ougein Rupees	= 1 Seer	=	1	15	10
4⅛ Seers	= 1 Dhurree	=	8	2	7
16⅞ Seers	= 1 Maund	=	137	8	2
12 Maunds	= 1 Maunee	=	1650	1	8

For further particulars, see *Malwa.*

DINDORE,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

DINDORE, *continued.*

Weights.

The Seer is divided as at Ahmednuggur, but weighs 76 Ankosee Rupees = 1 lb. 13 oz. 15 dr.

Measures of Capacity.

The Seer of Capacity weighs 100 Ankosee Rupees, and is divided as follows, the Tank being 239½ Grains.

			lb.	oz.	dr.
18 Tanks	= 1 Pao Seer	=	0	9	13⅓
4 Pao Seers	= 1 Seer	=	2	7	6½
2 Seers	= 1 Adholee	=	4	14	13
2 Adholees	= 1 Pylee	=	9	13	10
16 Pylees	= 1 Maund	=	157	10	0
20 Maunds	= 1 Candy	=	3152	8	0

For further particulars, see *Ahmednuggur.*

DOONGURPOOR,

The Capital of a small Principality, in the Province of Gujrat, under the Presidency of Bombay.

The Salim Shye Rupee is computed to weigh 168.75 grains, but accounts differ as to its fineness.

Weights.

			lb.	oz.	dr.
52 Salim Shye Rupees	= 1 Seer	=	1	4	0¾
10 Seers	= 1 Dhurree	=	12	8	7½
40 Seers	= 1 Maund	=	501	2	12
12 Maunds	= 1 Maunee	=	6014	1	0

For further particulars, see *Malwa.*

ESSLAMPORE,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Two Seers have been received from this place, which weigh 2 lb. 0 oz. 12 dr. and 2 lb. 3 oz. 15 dr.

ETAWAH, a town in the Province of Agra, under the Presidency of Bengal. See *Calpee.*

FAIFOE. See vol. I, p. 105.

FORT MARLBOROUGH,

In the Island of Sumatra.

Statements of the Monies, Weights, and Measures, of different parts of Sumatra, are given in vol. I, with references to each place, p. 119; but the following additional matter, which has been lately transmitted to the Court of Directors, will be also found useful.

Gold and Silver Weight.

			gr.
	1 Coondee	=	1.7722
30 Coondees	= 1 Keping	=	53.166
8 Kepings	= 1 Ringit	=	425.33
1½ Ringit	= 1 Tael	=	638.

The following Weights are used at Moco Moca, and occasionally at Fort Marlborough.

			gr.
	1 Koopang	=	9.967
4 Koopang or Soocoo	= 1 Mas	=	39.875
4 Mas	= 1 Pauh	=	159.5
2⅔ Pauh	= 1 Ringit	=	425.33
1½ Ringit	= 1 Tael	=	638.
16 Taels or 24 Ringits	= 1 Catty	=	10208 =

1 lb. 9 oz. 5 dwt. 8 gr. Troy, or 1 lb. 7 oz. 5 dr. Avoirdupois.

Black pepper is invariably weighed by English standard Weights.

Measures of Capacity.

			Cubic Inches.
	1 Chupah	=	63
4 Chupahs	= 1 Koolah	=	252
800 Koolahs	= 1 Coyan	=	201600

The Koolah for measuring paddy, rice, and peas, is struck; but it is hepead when measuring white pepper, coffee, baked rice, Indian corn, &c.

The Koolah of Malay rice weighs about 7 lb; that of Bengal rice and that of oil, nearly 8 lb. The Koolah of rice is occasionally used as a

FORT MARLBOROUGH, *continued.*

weight; and in this case 17 Koolahs constitute the Pecul of 133⅓ lb. Avoirdupois. The Koolah used in the interior districts is about half the size of that now under consideration.

The Coodee or Corge of tobacco consists of 40 Baskets—of every other article of 20.

Long Measures.

		Eng. Inches.
	1 Tempoh =	4.5
2 Tempohs	= 1 Jankal =	9
2 Jankals or Spans	= 1 Esto =	18
2 Estos or Cubits	= 1 Hailoh =	36
2 Hailohs	= 1 Depoh =	72

The Fathom of 6 feet has been established as a Standard of Measure in all places here, under the immediate influence of British authority.

Chinese Weights and Measures used at Fort Marlborough.

Gold Weight.

The Gold Catty is the same as that before referred to, which equals about 1 lb. 7 oz. 5⅓ dr.

Commercial Weight.

The Tael equals 1⅓ oz. Avoirdupois, or 575.625 Grains Troy; and is divided into 10 Chehs, 100 Hoons, 1000 Lees, 10,000 Sees, or 100,000 Hoots.

		lb. Avoirdupois.
16 Taels	= 1 Catty =	1⅓
100 Catties	= 1 Pecul =	133⅓

See vol. 1, page 67.

Long Measure.

		Eng. Inches
	1 Hoon =	0.144
10 Hoons	= 1 Choon =	1.44
10 Choons	= 1 Cheoh =	14.4
5 Cheohs	= 1 Gocheoh =	72
2 Gocheohs or Pointungs	= 1 Tung =	144

FURRUCKABAD,

A Town and District in the Province of Agra, under the Presidency of Bengal.

The Rupee here weighs 173 Grains, and contains 165.22 Grains of pure metal. It is therefore worth 24½d. sterling, at the new Mint price. See vol. 1, p. 88.

Weights.

		lb.	oz.	dr.
Wholesale Seer of 11	Furrd. Sicca Wt. =	0	4	5¼
Retail Seer of 14	ditto =	0	5	8¼
Spice Seer of 82	ditto =	2	0	7

The Weight of the above Spice Seer has been found 1 Dram heavier than the estimated weight by Rupees.

GAMRON. See vol. 1, p. 122 and 151.

GHOUHOWN,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Weights.

		lb.	oz.	dr.
The Seer (wholesale)	=	2	2	0
The Seer (retail)	=	2	4	12¼

GHROWLLE,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Weights.

The Seer equals 1 lb. 15 oz. 0¼ dr.

The Grain Measure contains 1 Seer 5 Chittacks = 2 lb. 8 oz. 12 dr.

The Guz measures 39¼ English Inches.

GOA. See vol. 1, p. 106 and 122; and also *Assay Report*, No. 75.

HANSOOT,

A Town in the District of Broach, under the Presidency of Bombay.

For the Monies, see *Assay Report*, Nos. 60 and 61.

Weights.

Market Seer.

		lb.	oz.	dr.
38 Broach Rupees Wt.	=1 Seer =	0	15	7
40 Seers	=1 Maund =	38	9	9
20 Maunds	=1 Candy =	771	15	4

Pergunnah Seer.

		lb.	oz.	dr.
38½ Broach Rupees Wt.	=1 Seer =	0	15	11
40 Seers	=1 Maund =	39	3	10
20 Maunds	=1 Candy =	784	8	8

The Pergunnah Seer, as above stated, is 1 Dram heavier than the estimated weight by Rupees.

Oil Measure.

		lb.	oz.	dr.	
38 Broach Rs. Wt.	=1 Seer =	0	15	7	= 31½ Cubic Inches.
42 Seers	=1 Maund =	40	8	6	
20 Maunds	=1 Candy =	810	7	8	

Sea Samum is weighed by the Market Seer.

Long Measure.

24 Tussoos = 1 Guz = 27⅛ English Inches.

HAVERY,

A Pettah in the Dooab, under the Presidency of Bombay.

Weights.

The Cutcha Seer for weighing ghee, tamarinds, pepper, &c. contains,

	oz.	dr.
In buying, 23¼ Madras Rupees Wt. =	9	9
In selling, 20⅛ ditto =	8	4½

The Dhurra for buying is 12⅞ Seers; and for selling, 12 Seers.

HAVERY, *continued.*

The Pucca Seer for grain, salt, &c. contains 82 Cubic Inches; and when filled with nine kinds of grain, mixed together, weighs 94½ Madras Rupees, or 2 lb. 6 oz. 13 dr. *See the note to Darwar.*

The Long Measure is the Guz of 24 Tussoos, which equals 34¼ English Inches.

HOOGHLEY. See vol. 1, p. 123.

HUMMERPORE,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Weights.

The Seer contains 2 lb. 0 oz. 7¼ dr.

The Guz equals 39 English Inches.

HURRUPAUL,

Under the Presidency of Bengal.

The Bazar Seer of 60 Sicca weight has been found to weigh 1 lb. 8 oz. 8¼ dr. which is nearly 2 drams lighter than the estimated weight by Rupees.

The Pao, Dry Measure, contains 31 Sicca weight 14 Annas, and equals 13 oz. nearly.

Liquids are sold by the Seer of 60 Sicca weight, which should equal 1 lb. 8 oz. 10 dr.

HUTARGAM,

A Pergunnah near Surat, under the Presidency of Bombay.

The Maund contains 40 Seers 8 Pice of Surat, and equals 37 lb. 13 oz. 10 dr.

For further particulars, see *Surat.*

INDORE,

A City in the Province of Malwa, under the Presidency of Bengal.

INDORE, *continued.*

For the Monies of Indore, see *Assay Report*, Nos. 56 and 57.

Weights.

		lb.	oz.	dr.
82 Ougien Rups.	= 1 Seer	= 2	0	6¾
5 Seers	= 1 Pusseree or Dhurree	= 10	2	1¾
20 Seers	= 1 Maund	= 40	8	6
12 Maunds	= 1 Maunee	= 486	4	8

The above Pusseree is called the Small or Kuranah (Dry Goods) Pusseree, by which every thing is sold in the Bazar; but the Bunniah (Retail Merchant) purchases grain by a larger or Grain Pusseree, which equals 10 lb. 4 oz. 11 dr. The Maund for Grain consists only of 20 Seers; but the Maund for Kuranah, as opium, ghee, spices, oil, and the like, is 40 Seers.

For further information, see *Malwa.*

JAMKHAIR,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

Commercial Weight.

The Seer weighs 80 Ankosee Rupees, and equals 1 lb. 15 oz. 8½ dr.

Measure of Capacity.

The Seer weighs 93½ Ankosee Rupees and 1¼ Massa. Its divisions and multiples are as follow:

		lb.	oz.	dr.
18 Tanks	= 1 Pao Seer =	0	9	3½
4 Pao Seers	= 1 Seer =	2	4	14½
2 Seers	= 1 Adholee =	4	9	13
2 Adholees	= 1 Pylee =	9	3	10
16 Pylees	= 1 Maund =	147	10	0
20 Maunds	= 1 Candy =	2952	8	0

For other particulars, see *Ahmednuggur.*

JAPAN. See vol. 1, p. 196.

JAVA. See *Bantam* and *Batavia*, vol. 1, p. 100, 122, and 124.

JUMBOOSUR,

A Town in the Province of Gujrat, and District of Broach, under the Presidency of Bombay.

Commercial Weight:

Market Seer.

		lb.	oz.	dr.
40 Broach Rupees Wt.	= 1 Seer =	1	0	2½
40 Seers	= 1 Maund =	40	6	4
20 Maunds	= 1 Candy =	807	3	0

The above Seer has been found 1 Dram lighter than the estimated weight by Rupees; and the following Seer has been found ¼ of a Dram heavier.

Pergunnah Seer for Dry Goods.

		lb.	oz.	dr.
40¾ Broach Rupees Wt.	= 1 Seer =	1	0	9
40 Seers	= 1 Maund =	41	6	8
20 Maunds	= 1 Candy =	828	2	0

In weighing cotton the Market Seer is used, 42 of which are reckoned to the Maund.

Long Measure.

24 Tussoos = 1 Guz = 27⅛ English Inches.

For Measures of Capacity, see *Broach.*

JUNGYPORE,

A Town in the Province and under the Presidency of Bengal.

The Seer, which is divided into 16 Chittacks, = 1 lb. 8 oz. 0½ dr.

The Seer, Liquid Measure, contains 50½ Cubit Inches.

The Cubit measures 18 English Inches.

JUNKCEYLON. See vol. 1, p. 106 and 123.

KAIRA,

A District under the Presidency of Bombay.

For the Rupees, see Remarks on *Assay Report*, Nos. 62 to 67.

Two standards only have been received from this place, viz. the Seer and the Guz. The former weighs 1 lb. 0 oz. 15½ dr.; and the latter measures 27¼ English Inches.

KATEE,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

	lb.	oz.	dr.
The Seer weighs 80 Ankosee Rupees =	1	15	8½
The Seer of Capacity = 95 ditto =	2	5	8

For further particulars, see *Ahmednuggur*.

KOOMBHAREEA,

A Pergunnah near Surat, under the Presidency of Bombay.

The Maund contains 40 Seers 8 Pice of Surat = 37 lb. 13 oz. 10 dr. See *Surat*.

KOTAH,

A City in Malwa, under the Presidency of Bengal.

The Kotah Rupee weighs 174.8 grains, and contains 159.7 grains of pure metal. It is therefore worth 23d. sterling.

Weights.

		lb.	oz.	dr.
30 Kotah Rupees	= 1 Seer =	0	12	0
5 Seers	= 1 Dhurree =	3	12	0
40 Seers	= 1 Maund =	30	0	0
12 Maunds	= 1 Maunee =	360	0	0

Measures.

48 Pice	= 1 Pye =	1	14	5½
18 Pye	= 1 Seyn =	34	2	3
20 Seyn	= 1 Maunee =	682	11	12

KOTAH, *continued.*

The Kotah Pice, on which this is founded, weighs 18 Massah, or 276.6 Grains.

For other particulars, see *Malwa*.

KOTOOL,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Seer of Capacity weighs 100 Ankosee Rupees = 2 lb. 7 oz. 6½ dr.

The other Weights and Measures are the same as at Ahmednuggur.

KURDAH,

A Town in the Province of Gujrat, under the Presidency of Bombay.

	lb.	oz.	dr.
The Seer weighs 80 Ankosee Rupees =	1	15	8½
The Seer of Capacity 90 ditto =	2	3	7½

For the rest, see *Ahmednuggur*.

KURMULLA,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Seer of Capacity weighs 100 Ankosee Rupees = 2 lb. 7 oz. 6½ dr.

For other particulars, see *Ahmednuggur*.

KUROD,

A Pergunnah near Surat, under the Presidency of Bombay.

The Maund contains 40½ Surat Seers = 37 lb. 15 oz. 8½ dr. See *Surat*.

LUCKIPORE,

A Town in the Province of Bengal.

The following are the actual contents of 4 Seers which have been received from this settlement:—

LUCKIPORE, *continued.*

	An. Pi.	lb.	oz.	dr.
Factory Seer of 72	11 7 Sicca Wt. =	1	14	2½
Seer of 80	=	2	1	1
Seer of 82	=	2	1	13
Bazar Seer of 82	10 =	2	1	14

The last of these Seers agrees very nearly with the estimated weight by Rupees. The first is 4¼ dr. heavier; the second, 3¼; and the third, 2¼ dr.

Cloth Measure.

	Eng. Inches.
The Cubit for measuring brown cloth =	19
Ditto washed cloth =	18

LUCKNOW,

A City in the Province of Oude, under the Presidency of Bengal.

Accounts are kept in Rupees. 93 Sicca Rupees, 13 Annas, 6 Pice = 100 Lucknose. Thus the Rupee of Lucknow weighs 168.6 grains.

The Seer weighs 2 lb. 7 oz. 6¼ dr.

MACASSAR. See vol. 1, p. 107 and 123.

MADRAS. For the Monies, Weights, and Measures of this Presidency, see vol. 1, p. 90 and 123; for the Exchanges, see vol. 2, p. 103. See also *Assay Report* in this Supplement, Nos. 3 and 38.

MAGINDANAO. See vol. 1, p. 107.

MALACCA. See vol. 1, p. 108 and 123.

MALDA,

A Town in the Province, and under the Presidency of Bengal.

The Standards received from this place are,

		lb.	oz.	dr.
Seer of 100 Sicca Wt. used at Malda	=	2	9	0
Ditto 96 Mogulbarry	=	2	7	5¼
Ditto 82 10 An. Jellalpore	=	2	1	14
Ditto 80 EnglishBazar	=	2	0	14¼

MALDA, *continued.*

The three first of the above Seers are each 1 Dram lighter than the estimated weight by Rupees, and the fourth is ½ Dram heavier. Each Seer is divided into 16 for Chittacks, and multiplied by 40 for the Maund.

The Seers of Capacity received, measure,

	Cubic Inches.
Seer of Malda =	72
Ditto Mogulbarry =	69.7
Ditto Jellalpore =	57.7
Ditto English Bazar =	60

MALDIVE ISLANDS. See vol. 1, p. 108.

MALWA,

An extensive Territory of Central India, under the Presidency of Bengal.

Accounts are kept here in Current Rupees, Annas, and Pice.

In the inferior departments of business each Pice is subdivided into 2 Adillahs, 4 Chedaums, 8 Dumries, 4 Gundas, and 96 Cowries. All these divisions are imaginary Monies, except the Cowries or Shells; for a description of which see the places referred to in the Index, vol. 2, p. 275.

The Silver Rupee varies both in its weight and fineness in the several mints of Malwa; and as the Seer is reckoned to weigh a certain number of the Rupees of the place, the Commercial Weights of Central India are various, as will be stated under different heads in this Supplement.

The only uniform weight in this territory is that for the precious metals, which is reckoned as follows:—

Gold and Silver Weight.

		Gr.
	1 Chawl =	0.247
8 Chawls =	1 Ruttee =	1.979
8 Ruttees =	1 Massa =	15.833
12 Massas =	1 Tolah =	190.

MALWA, *continued.*

Commercial Weight.

		lb.	oz.	dr.
84 Salim Shye Rupees	= 1 Seer =	2	0	6
5 Seers	= 1 Dhurree =	10	1	14
20 Seers	= 1 Maund =	40	7	8
12 Maunds	= 1 Maunee =	485	10	0

The above is the *Banswarra Weight*, which is extensively known in Malwa; but many other kinds are also used there, as will be shewn in their proper places.

Long Measure.

The *Guz* is the most common measure of length: in some places it equals 28 English Inches, and in others 32 Inches.

The *Wussa* is in general use here, particularly for measuring land; and it answers to 7 Feet $5\frac{3}{5}$ Inches, English.

MALWA, *continued.*

Land and Road Measures.

The *Beega*, or Indian Acre, contains 20 Square Wusas, or 60 Square Guz, and therefore varies as follows:—

	A.	R.	P.	
20 Wusas squared =	0	2	2	English
60 Guz ditto, at 28 Inches =	0	1	29	
Ditto at 32 ditto =	0	2	17	

The *Cos*, or Indian Mile, varies here from $1\frac{1}{2}$ to 2 English Miles. *

MANGALORE. See vol. 1, p. 108 and 123.

MANILLA. See vol. 1, p. 109.

MASULIPATAM. See vol. 1, p. 109 and 123.

MAURITIUS. See vol. 1, p. 110.

MERGUI. See *Rangoon*, vol. 1, p. 115.

* As Malwa has but recently become subject to the East India Company, no account of its Metrology has been yet transmitted to the Court of Directors, in answer to their Circular of 1821. This want, however, has been in a great measure supplied by SIR JOHN MALCOLM, in his "*Memoir of Central India*," published in 1823; and from that important work the different articles in this Supplement, relating to Malwa, have been, by permission, extracted. (See Note, p. 330).

It may be proper here to state, that as that Circular related only to Commercial Weights and Measures, no account has been transmitted respecting the *Road Measures* of India. Much useful information on this subject will, however, be found in the "*Memoir of a Map of Hindostan*," by MAJOR RENNELL, late Surveyor General of Bengal; and in the "*Asiatic Researches*" (vol. v) by H. T. COLEBROOKE, Esq. late President of the Asiatic Society of Calcutta.

From these authorities, it appears that the *Cos* (also called the *Cros*, *Crosa*, or *Hardary*) although differing in certain provinces of India, is notwithstanding more uniform than the Mile in several countries of Europe. It is, generally, of two sorts, namely, the *Standard Cos* and the *Common Cos*. The former is deduced from some scientific archetype, such as a degree of the meridian; and the latter from popular computation. Thus the most general standard is 35 Cos to a degree, and some are $37\frac{1}{2}$, 40, and 45. The Common Cos equals, on an average, nearly 2 English Miles; and 6 of these, in a direct and horizontal line, answer to about 7, according to the usual windings of the roads.

It is customary in many parts of India, as in several other countries, to estimate Itinerary Measures by time; that is, by the number of hours required, at an ordinary rate of travelling, to go any given distance. (See vol. 1, p. 11 and 117).

MIRZAPORE. See vol. 1, p. 123.

MOCHA. See vol. 1, p. 257 and 123.

MOCO MOCA. See *Sumatra.*

MOLUCCA ISLANDS. See *Amboyna*, vol. 1, p. 97 and 122; *Banda*, p. 99 and 122; and *Ternate*, p. 120 and 123.

MOTA,

A Pergunnah, near Surat, under the Presidency of Bombay.

The Maund contains 40¾ Seers 2 Pice of Surat =38 lb. 4 oz. 4¾ dr.

For other particulars, see *Surat.*

MOWDHAW,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Weights.

	lb.	oz.	dr.
The Seer (wholesale) =	2	2	15½
Ditto (retail) =	1	15	1½

The Dry Measure contains

1 Seer 11 Chittacks = 3 4 7½

The Cloth Measure = 38¾ English Inches.

MUNDISSOR,

A City in the Province of Malwa, under the Presidency of Bengal.

Weights.

		lb.	oz.	dr.
92 Salim Shye Rupees	=1 Seer =	2	3	7¾
4 Seers	=1 Dhurree=	8	13	15
15 Seers	=1 Maund =	33	4	4¾
12 Maunds	=1 Maunee=	399	3	3

For other particulars, see *Malwa.*

MUSCAT. See vol. 1, p. 123.

MYSORE. See vol. 1, p. 111 and 123. See also *Assay Report*, Nos. 9, 76, and 87.

NASSUCK,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

Weights.

	Ankos.	Rs.	Massas.	lb.	oz.	dr.
The Seer weighs	79	4 =	1	15	4½	
The Seer of Capacity	..99	2 =	2	7	1½	

For further particulars, see *Ahmednuggur.*

NATAL,

A Town in the Island of Sumatra.

The Monies of this place have been already described in vol. 1, p. 112, where also a concise view of the Weights will be found; but the following documents are more full and authentic, which have been transmitted with Standards, in obedience to the Circular of 1821.

Gold and Silver Weight.

		Gr.
	1 Rackay =	1.52
24 Rackays	= 1 Ammas =	36.5
16 Ammas	= 1 Tael =	584

Benjamin Weight.

		lb.	oz. Avoir.
	1 Tael =	0	1⅓
48 Taels	= 1 Catty Ootan =	4	0
20 Catties Ootan	= 1 Tompong =	80	0

Camphor Weight.

		lb.	oz. Avoir.
16 Taels	= 1 China Catty =	1	5⅓
3 China Catties	= 1 Catty Ootan =	4	0

NATAL, *continued.*

Grain and Liquid Measure.

		Cubic Inches.
	1 Pakha =	33.575
12 Pakhas	= 1 Sukat =	402.9
10 Sukats	= 1 Tub =	4029
80 Tubs	= 1 Coyan =	322320

NEW HOOBLY,

A Pettah in the Dooab, under the Presidency of Bombay.

Weights.

The Cutcha Seer for weighing oils and groceries equals 20⅜ Madras Rupees = 8 oz. 6 dr.

The Pucka Seer (wholesale) for measuring grain, salt, &c. contains 106½ Madras Rupees = 2 lb. 11 oz. 13 dr.

The Pucka Seer (retail) measures 90 Cubic Inches, and when filled with nine kinds of grain, equals 103¾ Madras Rupees, or 2 lb. 10 oz. 10 dr.

The Dhurra contains 13 Seers. (See Note, p. 341.)

The Guz of 24 Tussoos, for goods not sold by the Piece, measures 31¼ English Inches.

For further particulars, see *Darwar.*

NEYWASSA. See *Ahmednuggur.*

NOLYE,

A Town in the Province of Malwa.

Weights.

		lb.	oz.	dr.
80 Ougein Rupees	= 1 Seer =	1	15	10
5 Seers	= 1 Dhurree =	9	14	2
20 Seers	= 1 Maund =	39	8	8
12 Maunds	= 1 Maunee =	474	6	0

For further particulars, see *Malwa.*

NOWLGOOND,

A Pettah in the Dooab, under the Presidency of Bombay.

NOWLGOOND, *continued.*

Weights.

The Cutcha Seer for weighing oils and groceries contains 20¼ Madras Rupees = 8 oz. 8½ dr.

The Pucka Seer for measuring grain, salt, &c. measures 96.6 Cubic Inches, and weighs 110¼ Madras Rupees, or 2 lb. 13 oz. 5½ dr.

The Guz of 24 Tussoos = 33 English Inches
The Hath for Cloth = 18¼ ditto.

For further particulars, see *Darwar.*

OCKLESUR,

A Town in the Province of Gujrat, District of Broach, under the Presidency of Bombay.

Weights.

Market Seer.

		lb.	oz.	dr.
38 Broach Rupees Wt.	= 1 Seer =	0	15	6¼
40 Seers	= 1 Maund =	38	8	13
20 Maunds	= 1 Candy =	771	0	4

Pergunnah Seer,
for weighing Kuppas and Grains.

		lb.	oz.	dr.
39¼ Broach Rupees Wt.	= 1 Seer =	1	0	2¼
40 Seers	= 1 Maund =	40	6	14
20 Maunds	= 1 Candy =	808	9	8

The Pergunnah Seer received from this place, as above stated, is 1 Dram heavier than the estimated weight by Rupees.

The Measures for oil and sea samum, and the Long Measure, are the same as at *Hansoot*, which see.

OMUTWARRA,

A District in the Province of Malwa, under the Presidency of Bengal.

OMUTWARRA, *continued.*

Weights.

			lb.	oz.	dr.
81 Salim Shye Rs.	= 1 Seer	=	1	15	3¾
3½ Seers	= 1 Pusseree	=	6	13	5
2 Pusserees	= 1 Dhurree	=	13	10	10
4 Dhurrees	= 1 Maund	=	54	10	8
8 Maunds	= 1 Maunee	=	437	4	0
100 Maunees	= 1 Maniasa	=	43725	0	0

For further particulars, see *Malwa.*

OUGEIN,

A Town in the Province of Malwa, under the Presidency of Bengal.

For the Monies, see *Assay Report*, No. 56.

Weights.

			lb.	oz.	dr.
80 Ougein Rupees	= 1 Seer	=	1	15	10
5¼ Seers	= 1 Dhurree	=	11	5	14
16⅞ Seers	= 1 Maund	=	33	5	13
12 Mannds	= 1 Maunee	=	400	5	12

For further particulars, see *Malwa.*

PAICHAL,

A Pergunnah near Surat, under the Presidency of Bombay.

The Maund contains 48 Seers 8 Pice of Surat = 45 lb. 4 oz. Avoirdupois. See *Surat.*

PALIMBANG, a Town in Sumatra. See vol. 1, p. 112 and 123.

PALLODA,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Seer weighs 78 Ankosee Rupees and 10½ Massas = 1 lb. 15 oz. 2 dr.

The Seer of Capacity weighs 103½ Ankosee Rupees, and is divided and multiplied as follows, the Tank being equal to 248 Grains.

PALLODA, *continued.*

			lb.	oz.	dr.
18 Tanks	= 1 Pao Seer	=	0	10	3¼
4 Pao Seers	= 1 Seer	=	2	8	13
2 Seers	= 1 Adholee	=	5	1	10
2 Adholees	= 1 Pylee	=	10	3	4
16 Pylees	= 1 Maund	=	163	4	0
20 Maunds	= 1 Candy	=	3265	0	0

For further particulars, see *Ahmednuggur.*

PANDREE,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

The Seer = 2 lb. 11 oz. 12 dr.

The Long Measure = 40¾ English Inches.

PANWARREE,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

The Seer = 2 lb. 2 oz. 2 dr.

The Measure for Grain contains 2 Seers 13 Chittacks = 6 lb. 0 oz. 2 dr.

The Long Measure = 36⅜ English Inches.

PARNAIR,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

All the Weights and Measures here are the same as at Ahmednuggur, except the following:

	lb.	oz.	dr.
The Seer weighs 76½ Ankosee Rupees =	1	14	2½
The Seer of Capacity contains 95 Ankosee Rupees and 7 Massas .... =	2	5	2

PARNERE,

A Pergunnah near Surat, under the Presidency of Bombay.

The Weights and Measures of this place agree

PARNERE, *continued.*

with those of Surat, except in the following particular:

The Pauny Seery Measure contains 5 Seers, that is, as much batty or rice in the husk as will, if delivered by weight, amount to that quantity. See Note to *Darwar*.

PATNA,

A City in the Province of Bahar, under the Presidency of Bengal.

100 Patna Rupees = 95 Sicca Rupees 11 Annas.

Goldsmiths' Weight.

	Gr.
The Ruttee	= 3 1/20
The Massa	= 18 1/2
The Tolah	= 209

The above Weights, and also the following, have been received without any specification of their divisions or multiples.

	lb.	oz.	dr.
The Seer of 45 Sicca Weight	= 1	2	9
48 ditto	= 1	3	12
72 ditto	= 1	13	10 1/2
72 11 7	= 1	14	2
76 ditto	= 1	15	4 3/4
80 ditto	= 2	0	14 1/2
81 5	= 2	1	6 1/4

These Seers have been each found to weigh about 1 Dram more than the result, if computed at 179 8/3 Grains to the Sicca Rupee.

Oil and all liquids are sold by the above Seers of 45, 76, and 80 Sicca Weight; and also by Measures, standards of which have been transmitted to London, with the Seers, and have been found respectively to measure 32 1/2, 54.2, and 57.75 Cubic Inches.

Long Measure.

	Eng. Inches.
The Cloth and Carpet Measure	= 33
The Broad Cloth	= 42 1/2

PATNA, *continued.*

Other Measures have been received of 36 1/4, 40, 41, 42, 47, and 51 Inches; but their purposes are not mentioned.

PEGU. See vol. 1, p. 113 and 123.

PERSIA. See vol. 1, p. 277. See also *Assay Report*, Nos. 8, 73, 74, and 75.

PHILLIPINE ISLANDS. See *Magindanao*, vol. 1, p. 107; and *Manilla*, p. 109.

PERTABGHUR,

A Town in Central India, under the Presidency of Bengal.

For the Rupee see *Assay Report*, No. 85.

Commercial Measures and Weights.

		lb.	oz.	dr.
80 Salim Shye Rupees	= 1 Seer =	1	14	13 1/2
5 Seers	= 1 Dhurree =	9	10	3 1/2
20 Seers	= 1 Maund =	38	8	14
12 Maunds	= 1 Maunee =	462	10	8

For further particulars, see *Malwa*.

PONDICHERRY. See vol. 1, p. 113 and 123.

PRINCE OF WALES' ISLAND.

The mode of keeping accounts here is stated in vol. 1, p. 114; but the description of Weights and Measures in that article is not sufficiently ample, nor is it entirely correct. The following statements are therefore extracted from a very copious Dispatch on the subject, lately transmitted to the Court of Directors with the Standard Weights and Measures.

Goldsmiths' Weight.

		Gr.
12 Sagas	= 1 Mayam =	52
16 Mayams	= 1 Bongkal, or 2 Span. Dol. =	832
20 Bongkals	= 1 Catty =	16640

PRINCE OF WALES' ISLAND, *continued.*

A Catty of gold, it should be observed, is heavier than the common Catty, in the proportion of 105 to 78. At Achet, Siak, Malacca, and places on the east side of the Malay peninsula, the Bongkal and Catty Weights are about 10 per cent. less than the above. There is also a Bongkal *Measure*, which is in frequent use amongst Europeans and Native Traders to the eastward, and which is found to weigh very nearly 2 Dollars, or 832 Troy Grains.

Commercial Weight.

		lb.	oz.	dr.
	1 Tahil = (nearly)			23
16 Tahils	= 1 Catty =	1	6	13
100 Catties	= 1 Malay Pikul =	142	10	10⅔
3 Pikuls (Mal.)	= 1 Bhar =	428	0	0
40 Pikuls (Chi.)	= 1 Koyan =	5333	0	0

There are two kinds of Catties and Pikuls used in the Bazar—the Malay and the Chinese. The Malay Catty weighs 24 Spanish Dollars; the Chinese, 22½. Hence 15 Catties Malay = 16 Chinese. By the Malay or large Pikul of 142⅔ lb. Avoirdupois, merchants purchase pepper, tin, &c. from the native vessels; but sell by the Chinese, or Bazar Pikul of 133⅓ lb.

Measures of Capacity.

		Cubic Inches.
4 Chupahs	= 1 Gantang =	271.65
800 Gantangs	= 1 Koyan =	217320.

The Chupah is divided into halves and quarters.

There is a Measure used here, as well as in most of the neighbouring countries, termed a Parra, which is nominally a Measure of 10 Gantangs; but sometimes consists of 5, 15, or 20 Gantangs. It is by the Parra, the contents of which being previously settled, that rice, salt, and some other articles, are in general measured; and it is always by a Measure of this description that betel-nut is purchased on the Pedir Coast.

PRINCE OF WALES' ISLAND, *continued.*

Long Measure.

The Hasta or Cubit, which is divided into halves and quarters, equals 18 English Inches; and is used by the Malays and many other natives for measuring cloths. But the Chinese shopkeepers in the Bazar make use of the English Yard.

Land Measure.

		Eng. Yards.
4 Hastas	= 1 Depa =	2
2 Depas	= 1 Jumba =	4
20 Jumbas	= 1 Orlong =	80

Hence the Orlong or 80 Square Yards = 1 Acre 1 Rood 12 Perches, English.

RADNAGORE,

Under the Presidency of Bengal.

Weights.

The Seer of 62 Sicca Weight, used in the Bazar = 1 lb. 9 oz. 7¾ dr.

The Seer of 64 Sicca Weight, used for sugar and jagyry = 1 lb. 10 oz. 3¾ dr.

The Seer of 80 Sicca Weight, used for ghee = 2 lb. 0 oz. 14¾ dr.

The above Seers have been found to differ from their estimated weight in Rupees, as follows:—

The first, ⅓ Dram heavier; the second, ¾ Dram lighter; and the third, 1¼ Dram heavier.

Measures of Capacity.

The Baugee, by which paddy is sold, weighs 5 Seers of 62 Sicca Weight, which is, however, subject to variation. The Baugee for rice, weighs 6 Seers of 62 Sicca Weight, which varies according to the season.

		Cubic Inches.
The Seer for oil of 62 Sicca Weight	=	56
Ditto 80 ditto	=	60

The principal Long Measure is the Haut of 18 English Inches.

RAHORY,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Seer of Capacity weighs 115¼ Ankosee Rupees=2 lb. 13 oz. 8½ dr.; and that of Weight= 77 Ankosee Rupees=1 lb. 14 oz. 5¾ dr.

The other Weights and Measures are the same as at Ahmednuggur.

RAJAO,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Monies, Weights, and Measures here agree with those of Ahmednuggur, except that the Seer of Capacity weighs 100 Ankosee Rupees= 2 lb. 7 oz. 6¾ dr.

RANDIER. See *Surat.*

RANEE BEDNORE,

A Pettah in the Dooab, under the Presidency of Bombay.

The Pucka Seer for buying grain, salt, &c. weighs 116½ Madras Rupees=3 lb. Avoirdupois. The Pucka Seer for selling weighs 111½ Madras Rupees. When filled with nine kinds of grain, it equals 2 lb. 13 oz. 13 dr. See Note, p. 341.

The Hath for measuring cloth, turbands, &c. contains 18⅞ English Inches.

For further particulars, see *Darwar.*

RANGOON. See vol. 1, p. 115 and 123.

RAULT,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

Three Seers have been transmitted from this place, which weigh as follow:

RAULT, *continued.*

	lb.	oz.	dr.
Khaus Seer =	2	0	14
Avontah Seer, for grain =	2	8	0
Ditto =	1	9	14

The Guz contains 37 English Inches.

ROOMBHAREE,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Weights and Measures here are the same as at Ahmednuggur, except the following:

The Seer weighs 74 Ankosee Rupees=1 lb. 13 oz. 2¾ dr.

The Seer of Capacity weighs 102 Ankosee Rupees; and is divided and multiplied as follow:

			lb.	oz.	dr.
18 Tanks	= 1 Pao Seer	=	0	10	0¾
4 Pao Seers	= 1 Seer	=	2	8	3½
2 Seers	= 1 Adholee	=	5	0	6¼
2 Adholees	= 1 Pylee	=	10	0	13½
16 Pylees	= 1 Maund	=	160	13	8
20 Maunds	= 1 Candy	=	3217	9	0

ROONCH,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

	lb.	oz.	dr.
The Seer for Cotton =	2	9	10
Grain =	2	9	6

The Guz measures 38 English Inches.

RUNGYPORE,

A Town in the Province of Bengal.

The Standards received from this factory differ from their estimated Weight in Rupees as follows:—

RUNGYPORE, *continued.*

	Wt. by Rupees. lb. oz. dr.	Real Weight. lb. oz. dr.
Seer of 60 Sicca Wt.	= 1 8 10	1 8 12
65 ditto	= 1 10 11	1 10 10.6
72 11 7	= 1 13 13.8	1 13 10.7
73 ditto	= 1 13 15.6	1 14 1.7
80 ditto	= 2 0 13.6	2 1 1
90 ditto	= 2 4 15.5	2 5 1
160 ditto	= 4 1 11.2	4 2 4

The Guz for measuring Baftae cloths = 63 English Inches.

RUTLAM,

A Town in the Province of Malwa, under the Presidency of Bengal.

Weights.

		lb.	oz.	dr.
84 Salim Shye Rupees	= 1 Seer =	2	0	6
5 Seers	= 1 Dhurree =	10	1	14
20 Seers	= 1 Maund =	40	7	8
12 Maunds	= 1 Maunee =	485	10	0

The above are the weights by which goods are bought, but they are sold by the Seer of 80 Rupees = 1 lb. 14 oz. 13¾ dr.

Spices, betel, &c. are sold by a Seer of 79 Rupees Weight = 1 lb. 14 oz. 7½ dr.

ST. HELENA. See vol. 1, p. 306.

SALANGORE. See vol. 1, p. 115 and 123.

SALLOLPORE,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

	lb.	oz.	dr.
The Seer, Commercial Weight =	2	4	8
The Seer for Cotton =	2	8	9½

The Long Measures contain 38¾ and 40¾ English Inches.

SANTIPORE,

A Town under the Presidency of Bengal.

The Standards received from this Factory differ from their estimated weight in Rupees as follows:

	Wt. by Rupees. lb. oz. dr.	Real Weight. lb. oz. dr.
Seer of 60 Sicca Wt.	= 1 8 10	1 8 11.8
72 11 7	= 1 13 13.8	1 14 0.8
80 ditto	= 2 0 13.6	2 1 0.4
82 ditto	= 2 1 10.7	2 1 11.4
84 ditto	= 2 2 7.9	2 2 5.4
96 ditto	= 2 7 6.7	2 7 3

Export Warehouse.

	lb.	oz.	dr.
Seer, Factory Weight =	1	13	7.8
Seer, Bazar Weight =	2	0	14.4
Seer of 82 10 =	2	1	15

Import Warehouse.

	lb.	oz.	dr.
Factory Seer =	1	13	13.7
Bazar Seer =	2	0	13.6

Measure of Capacity.

The Seer of 80 Sicca Weight is found to contain 57.75 Cubic Inches.

Long Measure.

Two Measures of Length have been received, the one contains 18, and the other 36 Inches.

SCINDY. See vol. 1, p. 115 and 123.

SEESSOLURH,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

	lb.	oz.	dr.
The Retail Seer for Grain =	1	15	1
Wholesale =	2	2	9

The Long Measure = 40½ English Inches.

SENNUR,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

	lb.	oz.	dr.
The Seer weighs 76½ Ankosee Rupees =	1	14	2
The Seer of Capacity weighs 95 Ankosee Rupees and 7 Massas ---- =	2	5	11

For further particulars, see *Ahmednuggur*.

SERAMPORE. See vol. 1, p. 123.

SERINGAPATAM. See vol. 1, p. 116 and 123.

SHEWGAWM,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Weights and Measures here are the same as at Ahmednuggur, except the Seer, which weighs 77 Ankosee Rupees = 1 lb. 14 oz. 5¾ dr.; and the Seer of Capacity which weighs 115½ Ankosee Rupees = 2 lb. 13 oz. 8½ dr.

SIAM. See vol. 1, p. 117 and 123.

SINKELL. See vol. 1, p. 118.

SOOLOO. See vol. 1, p. 118.

SOOMERPORE,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

	lb.	oz.	dr.
The Seer (Retail) =	2	0	9¾
(Wholesale) =	2	3	0½

The Cloth Measure = 40⅛ English Inches.

SOONAMOOKY,

A Town under the Presidency of Bengal.

Two Seers have been received from this Factory, viz. one of 58 10 Sicca Weight = 1 lb. 8 oz. 0½ dr.; and the other of 60 Sicca Weight = 1 lb. 8 oz. 10 dr.

Poorseer Measures.

	lb.	oz.	dr.
Seer of 72 Sicca Weight =	1	13	9½
73 4½ =	1	14	1½
75 =	1	14	12¾
82 10 =	2	1	11¼

Long Measures.

	Eng. Inches
The Corah of the Native Merchants =	52.4
for unbleached Linen =	41.8
for bleached ditto =	41.
The Long Measure used at the Factory =	52.4
for unbleached Linen =	43.4
for bleached ditto =	42.6

SOOPA,

A Pergunnah near Surat, under the Presidency of Bombay.

The Maund contains 40¾ Seers of Surat = 38 lb. 3 oz. 4¾ dr.

For other Weights, Measures, &c. see *Surat*.

SOOPAH,

A Pergunnah in the District of Calpee, under the Presidency of Bengal.

	lb.	oz.	dr.
The Seer =	2	0	9½
The Seer of Capacity =	5	1	7¾

The Long Measure = 39¾ English Inches.

For further proportions, see *Calpee*.

SUCCADANA. See vol. 1, p. 119.

SUMATRA. See *Acheen*, *Bencoolen*, *Fort Marlborough*, and *Natal*, in this Supplement.—*Palimbang*, vol. 1, p. 112 and 123. *Sinkell*, vol. 1, p. 118. *Tappanooly*, vol. 1, p. 120.

SUNDA ISLES. See *Sooloo*, vol. 1, p. 118.

SUNGANMAIR,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Seer of Capacity weighs 100 Ankosee Rupees=2 lb. 7 oz. 6½ dr.

The Weights are the same as those of Ahmednuggur.

SURAT,

A City in the Province of Gujrat, under the Presidency of Bombay.

In addition to the account of the Monies, Weights, and Measures of Surat, given in vol. 1, p. 119, the following particulars (which have been recently received by the Court of Directors) are of importance.

Goldsmiths' Weight.

		Gr.
	1 Ruttee	= 1.95
3 Ruttees	= 1 Val	= 5.85
8 Ruttees	= 1 Massa	= 15.6
12 Massas	= 1 Tolla	= 187.5
35 Tollas	= 1 Seer	=6563 or 15 oz. Avoirdupois.

Weight for Pearls and Precious Stones.

		Gr.
	1 Vassa	= 0.1423
20 Vassas	= 1 Ruttee	= 2.846
3 Ruttees	= 1 Val	= 8.538
8 Vals	= 1 Tank	= 67.3
32 Vals	= 1 Tolla	=273.216

SURAT, *continued.*

Commercial Weight.

30 Surat Old Pice 42 Surat New Pice	= 1 Seer
40 Seers	= 1 Maund
7 Maunds	= 1 Small Harra
12 Maunds	= 1 Maunee
20 Maunds	= 1 Candy
21 Maunds	= 1 Large Harra
24 Maunds	= 1 Bhaur

Although the Surat Maund is said to contain only 40 Seers, or about 37⅓ lb. still it varies from 41 to 46 Seers; nor is the Candy uniformly confined to 20 Maunds.

	lb.	oz.	dr.
Grain of all kinds is sold by the Maund of 40 Seers	=37	8	0
Castor Oil by ditto of 40¼ Seers	=37	11	12¼
Oil, cocoa-nut, ghee, cotton, and spirits by ditto of 42 Seers	=39	6	0¼

Long Measure.

The Cloth Merchants' Guz, as well as that used by Carpenters and Bricklayers, is divided into 24 Tussoos. The former contains 27⅓, the latter 24 English Inches. The Hath or Cubit of 18 Tussoos, or 20.9 English Inches, is used in measuring bamboo mats only. The English Yard is in common use in all sales of European manufactures, and every description of cloth and piece goods.

Indian piece goods and a few other articles, are sold by the Corge of 20 pieces.

Timber Measure.

The Guz contains 20 Vussas or 200 Viswasees, and equals 27⅙ English Inches.

Land Measure.

		Eng. Inches.
4⅕ Tussoos	= 1 Viswasee	= 4.88
20 Viswasees	= 1 Vussa	=97.6
20 Vussas squared	= 1 Beega	= 2 Roods 17 Perches

SURBHAM,

A Pergunnah near Surat, under the Presidency of Bombay.

The Maund contains 39¼ Seers and 2 Pice of Surat = 37 lb. 4 oz. 4¾ dr.

For other particulars, see *Surat*.

TAPPANOOLY. See *Natal*.

TELLICHERRY. See vol. 1, p. 120 and 123.

TERNATE. See vol. 1, p. 120 and 123.

TOCOPA. See vol. 1, p. 121 and 123.

TONQUIN. See *Cachao*, vol. 1, p. 102.

TRANGANIA. See vol. 1, p. 121 and 123.

TRANQUEBAR. See vol. 1, p. 121 and 123.

TRINCOMALEE. See *Ceylon*, vol. 1, p. 104 and 122; and *Columbo*, p. 105 and 122.

TUMBUCK,

A District within the Collectorship of Ahmednuggur, under the Presidency of Bombay.

The Seer weighs 79 Ankosee Rupees and 4 Massas = 1 lb. 15 oz. 4½ dr.

TUMBUCK, *continued*.

The Seer of Capacity weighs 99 Ankosee Rupees and 2 Massas = 2 lb. 7 oz. 1½ dr.

For further particulars, see *Ahmednuggur*.

TURKESUR,

A Pergunnah near Surat, under the Presidency of Bombay.

The Maund contains 40 Seers 8 Pice of Surat = 37 lb. 12 oz. Avoirdupois.

For further particulars, see *Surat*.

UCKLESUR. See *Ocklesur*.

WALOR. See *Turkesur*.

WARUHA,

A Pergunnah near Surat, under the Presidency of Bombay.

The Weights and Measures here are the same as those of Surat, except the Maund, which contains 40½ Seers of Surat = 37 lb. 15 oz. 8½ dr.

WUNNU. See *Dindore*.

☞ *As the foregoing Supplement may be considered as a* COMMERCIAL GAZETTEER *for Oriental Settlements, so its Index, which here follows, may serve as a* DICTIONARY *for explaining, by references, the Weights, Measures, and Monies of the East Indies.*

INDEX TO THE SUPPLEMENT.

NOTE.—Such Terms as are contained in the Supplement, but not inserted in this Index, will be found explained in the General Index, p. 261 to 323, of this Volume.

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SUPPLEMENT.

EAST INDIES *(continued)*.

This Continuation of Indian Metrology was called for in 1827, in consequence of the recent arrival of a Collection of Standards from the Government of Madras, consisting of attested Models of the principal Weights and Measures of Southern India, with explanatory papers, all of which have been prepared by the proper Authorities, in obedience to the Circular Order issued by the Court of Directors in 1821, as stated in page 325 of this volume.

That extensive Order, it should be explained, was executed in due time throughout the Presidencies of Bengal and Bombay; and in 1824 the results were published in the foregoing part of this Supplement; but in certain provinces, subordinate to Madras, impediments occurred which were not entirely removed until the year 1826, when the Order of the Directors was completed in a very full and satisfactory manner.

As soon as this Collection arrived in London, it was delivered to the Author of the present Work, for the purposes of comparison for which the other Standards had been committed to his care, as stated in Mr. Secretary Dart's Letter, page 327; and the following are the results of his experiments, verified by the same Authorities as before, the principal Weights having been proved at the Royal Mint, by the liberal and important labours of Mr. Bingley, and the Measures in like manner by Mr. Troughton.—*See Pref.* page xii, &c.

The condition of returning the Standards, mentioned in the Secretary's Letter, has been likewise complied with, and they are accordingly deposited in his Office at the India House, in a commodious Cabinet constructed for the purpose, similar to the Cabinet lately erected at the Royal Mint for preserving the Standard Weights of other Countries, which have been collected and compared for this Work by order of Government.*

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* As the East India Company have essentially co-operated with His Majesty's Government in completing the universal comparison of Weights and Measures, so they have adopted the same new plan of laying up their verified Standards for future reference;—a plan which must prove permanently useful to philosophy as well as commerce, by affording the means of correcting Standards that are in wear, and of ascertaining what loss each may sustain in any given portion of time.

For a specimen of the utility of such comparisons, see Note, vol. 1. p. 294, on the diminution of the ancient Roman Pound, as deduced from Dr. Arbuthnot's Computations and the recent experiments at the London Mint.—See also vol. ii. p. 258.

EXPOSITION

*Of the Weights, Measures, and Monies, of Southern India.**

In the following Pages much repetition is avoided, by premising that each place is subordinate to Madras; and that the same Monies circulate throughout the Presidency as those explained in Vol. I. p. 90 and Vol. II. p. 103; and for the Contractions, &c. of the different Weights see *** p. 332.

ARCOT,

A Town and Capital of a District of the same name in the Carnatic.

Commercial Weight.

The Pucka Seer used in weighing common goods, as jaggery, sugar, tamarinds, oil, &c. is divided into halves, quarters, &c. and also into 24 Pollams, and answers to 1 lb. 13 oz. Avoirdupois, and its divisions in proportion. Hence 1 Pollam equals 531 Troy Grains nearly.

Dry Measure.

The measure used for grain of every description is the Puddy, which is divided into halves, quarters, &c. and contains 1⅞ English Quart.

The Puddy of grain streaked weighs 42 Pollams, or 3lb. 2 oz. 12 dr. but when heaped, as is the general practice, it weighs 47 Pollams, or 3 lb. 8 oz. 12 dr.

Long Measure.

The Long Measure is the Cubit, which equals 18 English Inches: The English Yard is also used in selling English Cloths, especially to Europeans.

The same Weights and Measures are in use at Allepay, Arnee, Chittoor, Vellore, and Wallajahbad, in the Carnatic.

BANGALORE,

A Town and Territory in the Eastern Range of the Mysore.

Weights for Jewellery, Gold, and Silver.

The weight of 16 small Grains of Paddy, or 4 Groometries (beans) is reckoned to compose the Gold Canteroy, or Sultany Fanam, which equals 5.87 Grains Troy.

9 Sultany Fanams = 1 Bahadry or Star Pagoda ..... = 52.8 Grains Troy.

10 Bahadry Pagodas = 1 Adpowe or 3 Rupees weight, at 30 Gold Fanams per Rupee ..... = 528.3 Gr. Troy.

80 Bahadry Pagodas = 1 Cutcha Seer or 24 Rupees weight = 4227 Gr. Troy or 9 Oz. 10½ Dr. Avoir.

Weights for Grocery, &c.

3 Rajah Rupees weight ..... = 1 Polum or Adpowe = 527 Gr. Troy.

2 Adpowes ..... = 1 Powe .. = 1059 Gr.

		lb.	oz.	dr.
4 Powes or 24 Rupees ..... = 1 Cutcha Seer ...	=	0	10	0
5 Seers ..... = 1 Punj Seer or Vis..	=	2	8	0

* Southern India comprehends that portion of the Peninsula, which extends from Cape Comorin to the River Kristna. These territories, with a few additional provinces, are under the Presidency of Madras, and those to the North-West of that river are subordinate to Bombay, while the regions to the North-East, which are by far the most extensive, are under Bengal, to which Presidency the other two are, in some degree, subordinate, and all are subject to the Court of Directors in London. But for the Laws and Government of the Presidencies, see *Auber's Analysis of the Constitution of the East India Company*; and for their Geography, see *Hamilton's Indian Gazetteer*, and his *Description of Hindostan*.

BANGALORE, *continued.*

		lb.	oz.	dr.
2 Punj Seers	= 1 Duddah	= 12	8	0
4 Duddahs	= 1 Maund	= 25	0	0
20 Maunds or 480 Rattles, at 40 Rupees weight each	= 1 Candy	= 500	0	0

The Maund of 40 Seers is used in all Revenue transactions and Circar accounts. The Merchants, in their retail dealings, weigh by the Punj Seer or Vis, or at the rate of 42 Seers to the Maund.

Grain Measure.

			Gr.
30 Gold Canteroy or Sultany Fanams weight	= 1 Rajah Pondicherry or Arcot Rupee	=	175.4

		lb.	oz.	dr.
5¼ Rupees	= 1 Chattack	= 0	2	1½
4 Chattacks	= 1 Powe	= 0	8	6½
4 Powes or 3½ Cutcha Seers or 84 Rupees weight of nine sorts of grain	= 1 Pucka Seer	= 2	1	10¾
2 Pucka Seers	= 1 Kistuaraz Bullah	= 4	3	5½
4 Bullahs	= 1 Do. Colagah or Coodom	= 16	13	6¾
20 Colagahs or 160 Pucka Seers	= 1 Do. Candagon or Candy	= 336	12	4½
1½ Colagah or 12 Seers	= 1 Company's Mercall	= 25	4	2

		cwt.	qr.	lb.
400 Mercalls or 30 Kistuaraz Candies	= 1 Garce	= 90	0	23

The Kistuaraz, Colagah, and Candy, have been used in the Circar accounts of the Mysore Territory ever since the capture of Seringapatam. Merchants, however, measure by Mercalls of 9, 10, 12, 16, 64, or 96 Pucka Seers, in wholesale dealings.

Long Measure.

			Inches.
3 Jows or Grains of Rice	= 1 Angle	=	2 1/10

BANGALORE, *continued.*

			Inches.
3 Angles	= 1 Gerah	=	6 1/10
8 Gerahs	= 1 Haut or Cubit	=	19 1/10
2 Hauts	= 1 Guz	=	38 2/10

This Guz is established by the Mysore Government for the measurement of land. See vol. i. p. 89.

BELGAUM,

In the Southern Mahratta Country.

The Weights and Measures principally used at Belgaum and Shapere are the following:—

Weights.

1 Shapere Rupee = 174 Gr.

			lb.	oz.	dr.
24 Rupees weight	= 1 Seer	=	0	9	8
11 Seers	= 1 Dhuddie	=	6	8	15
4 Dhuddies	= 1 Maund	=	26	3	15
20 Maunds	= 1 Candy	=	524	14	12

Measures.

			Quarts.
8 Kalary	= 1 Paw or Seer	=	1 5/10
2 Pawaas or quarters	= 1 Adholy or half	=	2 1/10
2 Adholies	= 1 Payebee	=	5¼
24 Payebees	= 1 Koora	=	31½ Gal.
20 Kooras	= 1 Candy	=	630

BELLARY,

A Town and Province in the Ceded Districts.

Gold and Silver Weight.

Gold and Silver are bought and sold by the Mysore Rajah's new, or Company's old or Pondicherry Rupee, weighing 176¼ Grains Troy, and denominated Thollam, the divisions of which are as follow:—

			Gr.
3 Goondoominies (vegetable beads)	= 1 Canteroy Fanam	=	5.875
2½ Canteroy Fanams	= 1 Mass	=	14.687

BELLARY, *continued.*

		Gr.
9 Cantary Fanams.	=1 Bahadry Pagoda ...	= 52.875
30 Do. do.....	=1 Thollam.	= 176.25
24 Thollams or Rupees	=1 Seer	=4230

or 9 Oz. 10 Drams Avoirdupois.

This Table of Weights is applicable to the whole of this range.

Commercial Weights.

Gross goods, such as sugar, tamarinds, meat, oil, ghee, &c. are sold by the undermentioned weights, regulated by the Mysore Rupee.

		lb.	oz.	dr.
	1 Mysore Rupee or Thollam =	0	0	6.445
21 Rupees.....	=1 Seer... =	0	8	7.34
6 Seers	=1 Puncha Seer .... =	3	2	12
2 Puncha Seers	=1 Dhadium =	6	5	8
4 Dhadiums ..	=1 Maund. =	25	6	0

Thus the Bellary Maund is 6 Oz. more than the Madras Maund, reckoning the Mysore Rupee as above; but reckoning the same Rupee at 176.16 Grains, according to Noton's Table, p. 331 of this volume, the excess of the Bellary Maund would be 5 Oz. only.

Cotton Weight.

Cotton is weighed by the Maund and Miggah; the Dhadium or Quarter Maund being equal to 256 Company's Rupees, new coinage, denominated by the natives Gaaders or Bandy Rupee.

Computing this at 180 Grains, the following is the cotton weight.

		lb.	oz.	dr.
256 Rupees	=1 Dhadium =	6	9	5
4 Dhadiums ..	=1 Maund =	26	5	4
12 Maunds ...	=1 Nuggah =	315	15	10

Grain Measure.

The following is the ancient Grain Measure of the country, still used in the districts, and regulated by a Measure called Thealee or Thimmapoo, containing 112 Madras Rupees weight of nine sorts of grain, known by the name of the Nuoadanium measurement.*

BELLARY, *continued.*

		lb.	oz.
112 Rupees.....	=1 Thimmapoo =	2	14
3 Thimmapoos or 4 Giduah	=1 Sollagay =	8	10
4 Sollagays ...	=1 Maanah =	34	8
4 Maanahs....	=1 Pullah =	138	0
4 Pullahs	=1 Collagah =	552	0
5 Collagahs ...	=1 Punchagah =	24c.2q.16lb.	
4 Punchagahs .	=1 Contagah =	98	2 8

The Giduah is thus equal to the Bellary Pucka Seer of 84 Rupees, which is the measure now generally used for grain of all kinds, and which equals 2 lb. 1 oz. 14 dr.

Chunam is measured by the Mercal, containing 12 Pucka Seers, of 84 Rupees weight, grain measurement, and 5 Mercals make the Parrah.

Long Measure.

Cloths, carpets, &c. are measured as follows:—

12 Inches = 1 Foot
1½ Foot = 1 Cubit
2 Cubits = 1 Yard or Guz = 36 Engl. Inches.

CALICUT,

A Town and District on the Malabar Coast.

For the Monies and Money Weights see Vol. I. p. 102.

The Commercial Weight is as follows, and is commonly used in all Malabar.

			lb.	oz.	dr.
10 Surat Rupees	= 1 Pollam =		0	4	1⅓
2 Pollams.....	= 1 Seer . =		0	8	2⅔
2 Seers	= 1 Pound =		1	0	5½
34 Pounds.....	= 1 Maund =		34	11	11
20 Maunds.....	= 1 Candy =	6 cwt. 0 qr. 23 lb.			

* These nine sorts of grain are,—Rice, Wheat, Coolty, Pasaloo, Mernoomooloo, Oil Seeds, Bengal Grain, Annoomooloo, and Nooloo.

CANNANORE,

A Town and District in Malabar.

Commercial Weight.

			lb.	oz.	dr.
10 Surat Rupees	= 1 Pollam..	=	0	4	$1\frac{1}{3}$
2 Pollams.....	= 1 Seer....	=	0	8	$2\frac{2}{3}$
2 Seers.....	= 1 Pound ..	=	1	0	$5\frac{1}{2}$
30 Pounds....	= 1 Maund ..	=	30	10	5
20 Maunds ...	= 1 Candy	= 5 cwt. 1qr. 24lb.			

CHITTOOR. See *Arcot.*

COCHIN,

A Town and District in Malabar.

Weights.

		lb.	oz.	dr.
$42\frac{1}{2}$ Surat Rupees Weight	= 1 Pound.. =	1	1	6
25 Pounds	= 1 Maund.. =	27	2	11
20 Maunds or 500 Pounds	= 1 Candy.. =	543	6	4

By this weight sugars, spices, and metals are sold; other goods are weighed by the Maund of 30 lb., and the Candy of 600 lb.

Note. The Cochin Standard Pound, recently received from India, weighs 1lb. 2 oz. 2 dr., but the above computation is made from the Surat Rupee, according to the instruction in the accompanying dispatch.

Measures.

The measure of capacity used at Cochin contains $1\frac{1}{4}$ Pint.

The Parrah, used for grain, contains 45 such measures, or 7 Gallons nearly.

The Choadany for oil contains 24 such measures, or $3\frac{3}{4}$ Gallons.

Timber measure is the same as at *Travancore.*

For further particulars, see Vol. 1. p. 104.

COILPATAM. See *Masulipatam.*

COLATCHEY,

A Town in the Province of Travancore.

Weights.

		Gr.
20 Munjandies	= 1 Kullanjee. =	78
$13\frac{1}{2}$ Kullanjees	= 1 Pollum .. =	105.3

		lb.	oz.	dr.
$67\frac{1}{2}$ Kullanjees	= 5 Pollums wt. =	0	12	$0\frac{1}{2}$
100 Pollums .	= 1 Toolum .. =	15	0	11
25 Rautuls or 125 Pollums	= 1 Maund... =	18	12	13
20 Maunds or 500 Rautuls.	= 1 Candy ... =	376	1	2

By the above weight, metals, spices, and sugars, are sold; other goods are weighed by the Maund of 150 Pollums, and the Candy of 600 Rautuls.

DINDIGUL,

A Town and District in the Southern Division.

Weights.

The weight for common articles of provision, and for all kinds of drugs, is $\frac{1}{176}$ of a Toolam, which answers to 1 lb. 3 oz. 8 dr. Avoirdupois; and hence 1.282 Toolam is equal to the Maund of 25 lb. The Toolam is divided into halves, quarters, eighths, and sixteenths. It is also divided into 100 Pullums.

Measures.

The measure for all sorts of grain answers to $1\frac{1}{176}$ English Quart. The Mercal contains 5 Dindigul grain measures, and therefore equals $8\frac{7}{176}$ Quarts.

GANJAM. See *Masulipatam.*

HYDRABAD,

A City in the Nizam's Country.

Grain is sold by the following weights:—The Seer being equal to 13896 Grains Troy.

		lb.	oz.	dr.
5 Hydrabad Rupees ..	= 1 Chittack... =	0	1	$15\frac{3}{4}$
16 Chittacks..	= 1 Seer..... =	1	15	12
5 Seers	= 1 Punsarry.. =	9	14	12

HYDRABAD, *continued.*

		lb.	oz.	dr.
12 Seers	=1 Small or Cutcha Maund	=23	13	0
40 Ditto	=1 Great or Pucka Maund	=79	6	0
120 Ditto	=1 Selling Pullah	=238	2	0
124 Ditto	=1 Purchasing Pullah	=246	1	0

The Cloth Measure answers to 35⅓ English Inches.

JAULNAH,

In the Nizam's Country.

Small Bazar *Weights for gold, silver, drugs*, &c.

		Troy Grains.
2 Rice Grains.	=1 Oourd Grain	= .48
2 Oourd Grains	=1 Wheat Grain	= .96
2 Wheat Grains	=1 Ruttee	= 1.92
2 Ruttees	=1 Wall	= 3.84
4 Walls	=1 Masha	= 15.375
12 Mashas	=1 Tola	= 184.5
4¾ Tolas or 57 Mashas	=1 Chittack	= 876.7
16 Chittacks	=1 Seer	= 14027

which is equivalent to the Seer in Pucka Weights, viz. 2 lb. 0 oz. 1 dr.

Bazar *Pucka Weights*, for Grain, &c.

		lb.	oz.	dr.
5¼ Pice	=1 Chittack	= 0	2	0
16 Chittacks or 80 Rupees	=1 Seer	= 2	0	1
40 Seers	=1 Maund	= 80	2	8
3 Maunds.	=1 Pullah.	=240	7	8

Bazar *Cutcha Weights*, for ghee, tobacco, &c.

		lb.	oz.	dr.
16 Chittacks	=1 Seer	= 2	0	1
12 Seers	=1 Maund	=24	0	12

Liquid Measures.

		lb.	oz.	dr.
16 Chittacks	=1 Seer	= 2	0	1
12 Seers	=1 Maund	= 24	0	12
10 Maunds	=1 Pullah	=240	7	8

JAULNAH, *continued.*

Cloth Measure.

			English Inches.
3 Unglees	=1 Girrah	=	$2\frac{1}{10}$
8 Girrahs	=1 And Guz	=	$16\frac{8}{10}$
2 And Guzes	=1 Guz	=	$33\frac{6}{10}$

KALIAT,

In Malabar.

In this place, and at Kotakul, Quilandy, and Kapaud, the measure used is the Dungaly, which contains 2¼ Quarts English.

KAPAUD. See *Kaliat.*

KOTAKUL. See *Kaliat.*

KOTAR. See *Quilon.*

MADURA,

A City in the Southern Carnatic.

The Weights and Measures here are the same as at Trichinopoly, with the following exceptions:—

The Madura Secr, for weighing gold and silver, contains 80 Madura Pagodas Weight, and answers to 4480.7 Gr. Troy, or 10¼ Oz. Avoirdupois, and 39.244 such Seers are equal to 1 Maund of 25 Pounds. The Seer is divided into 50, 30, 20, &c. parts, down to the 64th part of the Pagoda, which is 56 Gr. nearly.

The Measure used for all sorts of grain, and also for gingely, oil, &c. is equal to 1⅞ English Quart. Six of these measures make 1 Mercal, or 2⅜ Gallons nearly.

MASULIPATAM,

In the Northern Circars.

The following are the Weights and Measures used at Masulipatam, and other Stations of the Northern Division.

MASULIPATAM, *continued.*

Gold Weight.

			Gr.
$\frac{1}{9}$ of a Madras Pagoda	=1 Chunam	=	5.968
30 Chunams	=1 Tolam	=	179.04
24 Tolams	=1 Seer	=	4296.96

Silver is weighed against Rupees, 24 of which make 1 Seer.

Commercial Weights.

The weight used for iron bars, tin, tobacco, ghee, oil, jaggery, chillies, tamarinds, sugar, &c. from Visagapatam to Ganjam, is the $1\frac{1}{4}$ Cutcha Seer, of 100 Madras Pagodas, containing $12\frac{1}{2}$ Oz. Avoirdupois.

Its multiples and divisions are as follow:

			lb.	oz.
2 Chattaucks	=1 Nowtauk	=	0	$1\frac{1}{4}$
8 Nowtauks	=1 Seer	=	0	10
10 Nowtauks	$=1\frac{1}{4}$ Seer	=	0	$12\frac{1}{2}$
5 Seers	=1 Viss	=	3	2
40 Seers	=1 Maund	=	25	0
20 Maunds	=1 Candy	=	500	0

There is also a Pucka Seer in use for Moguls Moormen, and generally for persons coming from Calcutta and Hydrabad, viz.

2 Chattaucks	=1 Nowtauk	= $\frac{1}{4}$lb.
8 Nowtauks	=1 Seer	= 2lb.
5 Seers	=1 Viss	=10lb.
8 Viss	=1 Maund	=80lb.

The Cutcha Seer of 90 Madras Pagodas, used by Merchants in dealing with each other, is thus divided:

			lb.	oz.
2 Chattaucks	=1 Nowtauk	=	0	$1\frac{3}{2}$
8 Nowtauks	=1 Seer	=	0	$11\frac{1}{4}$
5 Seers	=1 Viss	=	3	$8\frac{1}{4}$
40 Seers	=1 Maund	=	28	2
20 Maunds	=1 Candy	=	562	8

The weight used for brass, copper, and tutenag, is the Seer of 72 Madras Pagodas, which is thus divided:

			lb.	oz.
2 Chattaucks	=1 Nowtauk	=	0	$1\frac{1}{8}$
8 Nowtauks	=1 Seer	=	0	9

MASULIPATAM, *continued.*

			lb.	oz.
40 Seers	=1 Maund	=	22	8
20 Maunds	=1 Candy	=	450	0

The $1\frac{1}{4}$ Seer of 96 Madras Pagodas is used for weighing cotton.

			lb.	oz.
	$1\frac{1}{4}$ Seer	=	0	12
32 $1\frac{1}{4}$ Seers	=1 Maund	=	24	0
20 Maunds	=1 Candy	=	480	0

From Coilpatam to Visagapatam, these weights are in use, under the following denominations and divisions:

			lb.
	1 Yabbolam	=	$0\frac{3}{4}$
2 Yabbolam.	=1 Puddalum	=	$1\frac{1}{2}$
16 Puddalum.	=1 Maund	=	24
20 Maunds	=1 Candy	=	480

Grain Measure.

			Pints.
2 Giddahs.	=1 Arsolah or $\frac{1}{4}$ Seer	=	$0\frac{1}{3}\frac{7}{2}$
2 Arsolahs	=1 Solah $\frac{1}{2}$ do.	=	$1\frac{1}{16}$
2 Solahs	=1 Zavah 1 do.	=	$2\frac{1}{8}$
2 Zavahs	=1 Mannikah 2 do.	=	$4\frac{1}{4}$
6 Mannikahs	=1 Mercal 12 do.	=	$3\frac{1}{8}$ gal.
80 Mercals	=1 Candy 960 do.	=	250
5 Candys or 400 Mercals	=1 Garce 4800 do.	=	1250

The half Mercal of 6 Seers is in general use among the natives.

Cloth Measure.

	1 Palm	= $3\frac{3}{16}$ Inches.
2 Palms	=1 Span	= $6\frac{3}{8}$
3 Spans	=1 Cubit	= $19\frac{1}{8}$
2 Cubits	=1 Yard	= $38\frac{1}{4}$

NEGAPATAM,

In the Southern Carnatic.

Weights.

The weight used for all articles of provision is the Seer, which is equal to $9\frac{5}{8}$ English Ounces;

NEGAPATAM, *continued.*

and therefore 41.558 such Seers are equal to the Maund of 25lb. Avoirdupois: The Seer is divided into 8 Pullums. That received in London weighs 4236 Gr. Troy.

Grain Measure.

The measure used for all kinds of Grain answers to $1\frac{1}{16}$ English Pint, and is divided into halves, quarters, and eighths. The Mercal is equal to 4 Negapatam grain measures, and therefore answers to $7\frac{1}{4}$ Pints.

Oil Measure.

The Oil measure in general use for wholesale and retail, is equal to 1 English Quart, and is divided into halves, quarters, and eighths.

PALAMCOTTAH,

In the Southern Division of the Carnatic.

Gold and Silver Weight.

The Seer used for weighing gold, silver, &c. is 4551 Gr. or $10\frac{3}{4}$ Oz. Avoirdupois; and therefore 38.453 such Seers make the Maund of 25 lb.

There are also weights of 100 Cullengeys, with divisions and subdivisions, down to the 32d part. 56 Cullengeys make the Seer. 1 Cullengey $=81\frac{1}{4}$ Gr. Troy.

Commercial Weights.

The weight used by retail sellers, for drugs and provisions, is the eighth of a Toolam, which equals 1 lb. 9 oz. Avoirdupois; and thus, 2 Toolams make the Maund of 25 lb. 100 Pullums compose the Toolam, which is equal to $12\frac{1}{2}$ lb.

The sixteenth of a Toolam, used for weighing the foregoing articles by wholesale, is equal to 1 lb. 3 oz. and thus, 1.315 Toolam makes the Maund of 25lb.

PALAMCOTTAH, *continued.*

The quarter Puddy, used for weighing brass, copper, pewter, tutenag, &c. equals 1 lb. $3\frac{3}{4}$ oz. and hence 5.63 Puddies make the Maund.

The Puddy therefore contains 4 lb. 15 oz. and is divided into halves, quarters, &c.

The Seer used for weighing tape, rope, &c. answers to 1 lb. 13 oz. and 13.793 such Seers make the Maund of 25 lb.

Grain Measure.

The measure used at the Bazaar and by Merchants, for all kinds of grain, answers to $1\frac{7}{7}$ Quart English, and 6 such measures make 1 Mercal $=1\frac{1}{6}$ Gallon nearly.

The Corn Measure used by the Revenue and by the Farmers, answers to $1\frac{5}{64}$ Quart English, and 8 such measures make the Mercal, or $2\frac{5}{32}$ Gallons.

Both Mercals are divided into halves, quarters, &c.

Long Measures.

The Gajum or Measure used by Cloth Merchants, both here and at Trichinopoly, answers to $36\frac{1}{4}$ English Inches.

The Moora used by Stone-Masons is $29\frac{9}{10}$ such Inches, and that used by Carpenters $32\frac{8}{3}$ Inches.

QUILANDY. See *Kaliat.*

QUILON,

A City in Travancore.

The common weight used here, also at Allepey, Trevandrum, and Kotar, is the Olunda or Dutch Pound, which answers to 7660 English Gr. or 1 lb. 1 oz. 8 dr. Avoirdupois.*

			Eng. Gr.
20	Munjandies	$=1$ Kullanjee.	$=$ 77.86
18	Kullanjees	$=1$ Pollum ..	$=1012.18$

* This Dutch Pound is found to be $1\frac{1}{4}$ Dram heavier than the Commercial Standard of Holland; and here it may be observed, that the Amsterdam Weight has been established, not only in all the Dutch Settlements in the East and West Indies, but anciently in several Countries of Europe, and is still partially retained in Scotland. It is likewise curious to remark that, in England, it was the Commercial Weight before the 15th century, and has been continued down even to the present century in fixing the Assize of Bread.—See vol. i. p. 221. Also pages 9, 309, and 366.

QUILON, *continued.*

		lb.	oz.	dr.
98¾ Kullanjees	= 1 Olunda =	1	1	8 Av.
25 Pounds or Olundas	= 1 Maund =	27	5	8
20 Maunds	= 1 Candy =	546	14	0

The above Maund of 25lb. Dutch is used for metals, spices, and sugars, but for other articles the Maund of 30lb. is employed.

The Kotar of 14lb. is used for weighing articles for the palace at Trevandrum; the Tricoor Toolam of 16lb. and the Toodoovalah Toolam of 18lb. also the Toolam of 20lb. for dammer, wax, and other light goods.

In the District south of Quilon to Tavallay, a Five Pollum weight is used for weighing cotton, thread, tamarinds, jagherry, &c. which weight answers to 5848.3 gr. and is thus divided:—

		lb.	oz.	dr.
20 Munjandees	= 1 Kullanjee =	0	0	2.85
15 Kullanjees.	= 1 Pollum . =	0	2	10.77
75 Kullanjees	= 5 Pollums Weight. =	0	13	5.86
100 Pollums	= 1 Toolam =	16	11	5.6

The following are the weights by which spices only are weighed, in which 5 Pollum weight answers to 5457 gr.

		lb.	oz.	dr.
20 Munjandees	= 1 Kullanjee. =	0	0	2.8
14 Kullanjees .	= 1 Pollum... =	0	2	7.9
70 Kullanjees .	= 5 Pollums Wt. =	0	12	7.5
100 Pollums ...	= 1 Toolam ... =	15	9	7.3

SANKERRYDROOG,

A Town in the Southern Division of the Carnatic.

The Seer for provisions, drugs, &c. weighs 9¼ Oz. Avoirdupois, and 41.256 such Seers = the Maund of 25lb. The Seer contains 8 Pullums, which is divided into halves, quarters, &c.

	English Quarts.
The measure used in the Bazar for grain and oil	= 0 1¾
And that used by Farmers for the same articles	= 0 0⅞
4 such measures ... = 1 Vallum.	= 0 3½

SEKUNDERABAD,

In the Nizam's Country.

The Seer by which grain, &c. is purchased and retailed in the Cantonment of Sekunderabad, is equal to 14106 English Grains, and is thus divided:—

		lb.	oz.	dr.
5 Company's Rupees	= 1 Chattack =	0	2	0 1/16
16 Chattacks	= 1 Seer ..... =	2	0	1
5 Seers	= 1 Punsarrie =	10	0	4
12 Ditto	= 1 Cutcha Maund .. =	24	0	10
40 Ditto	= 1 Pucka Maund .. =	80	1	15
120 Ditto	= 1 Selling Pullah .. =	240	6	9
126 Ditto	= 1 Purchasing Pullah =	252	7	14

The Long Measure contains 35⅓ English Inches, and is divided into 24 parts; hence, each part equals 1.472 English Inch.

SERINGAPATAM,

A City in the Western Range of the Mysore.

The Monies, Weights, and Measures of Seringapatam, have been generally described, vol. i. p. 116, as deduced from "Dr. Buchanan's Travels through the Mysore;" but the following statements, now received from the Government of Madras, are more regular in their specifications and other particulars.

Weights and Measures.

The Standards established in Mysore by the late Tippoo Sultan are as follow:—

The Cutcha Seer is the basis of the weights, and is equal to 24 Sultany Rupees = 4248 Troy Grains, or 9 Oz. 11⅓ Dr. Avoirdupois. On this is founded the following set of weights.

		lb.	oz.	dr.
	1 Pollum .. =	0	1	3¾
8 Pollums ...	= 1 Cutcha Seer =	0	9	11⅓
5 Cutcha Seers	= 1 Panch Seer =	3	0	9
8 Panch Seers	= 1 Maund... =	24	4	8
20 Maunds ...	= 1 Candy... =	485	10	0

By the above are weighed sugar, jaggery, turmeric, pepper, spices, ghee, oil, &c.

SERINGAPATAM, *continued.*

Note. The foregoing contents of the Cutcha Seer agree with the article before mentioned, vol. i. p. 116, and also with the dispatch recently received; but the model of this Seer, transmitted at the same time, is found lighter by 1½ Dram. It is therefore deemed safer here to adopt the above number of Sultany Rupees as the foundation of the system of weights, than this Standard, especially as agreeing with other high authorities.

The Pucka Seer is formed by mixing equal quantities of nine sorts of grain,* and of this mixture 84 Rupees weight is taken and put into a vessel which will exactly contain it when heaped. This serves as the Standard, from which the following Dry Measure is established.

		lb.	oz.	dr.
16 Chattacks	= 1 Sultany Pucka Seer	= 2	1	15¾
16 Seers	= 1 Colagah	= 33	15	12
20 Colagahs	= 1 Candy	= 679	11	0

By this Measure grain of all kinds is sold, and also milk.

Cloth and timber are usually measured by the Cubit of 18 English Inches.

SHAPERE. See *Belgaum.*

TAVALLAY. See *Quilon.*

TELLICHERRY,

A Seaport on the Malabar Coast.

		lb.	oz.	dr.
10 Surat Rupees	= 1 Pollam	= 0	4	1⅓
2 Pollams	= 1 Seer	= 0	8	2⅔
2 Seers	= 1 Pound	= 1	0	5½
32 Pounds	= 1 Maund	= 32	11	0
20 Maunds	= 1 Candy	= 653	12	0

For further particulars, see vol. i. p. 120.

TRAVANCORE,

A Province in the South-West of the Peninsula.

Weights.

The Pootoor, Pound, or Rautul, by which the Circar receives pepper from the inhabitants, contains 6972 Troy Grains, and is thus divided:

20 Munjandies = 1 Kullanjee = 78 Gr.

		lb.	oz.	dr.
89¼ Kullanjees	= 1 Pootoor	= 0	15	15
20 Pounds	= 1 Toolam	= 19	14	11
20 Toolams	= 1 Bauram	= 398	5	12
30 Toolams or 600lb.	= 1 Candy	= 597	8	10

The Rautul or Pound, by which the Circar pepper is sold, equals 7007½ Troy Grains, and is divided as follows:—

20 Munjandies = 1 Kullanjee = 78 Gr.

		lb.	oz.	dr.
89¾½ Kullanjees	= 1 Rautul or lb.	= 1	0	0¼
25 Pounds	= 1 Maund	= 25	0	6½
20 Maunds	= 1 Candy	= 500	8	2

Measures.

The Measure used for grain of every description is the Parah, which is composed of 10 Agarasaulay Dungallys, and contains 1⅞ Quart.

The Measure for oil, ghee, &c. is as follows:

		Quart.
11¼ Dungallys	= 1 Choradany	= 1 3/32
30 Choradanys	= 1 Candy	= 8 1/6 ¾ Gall.

The following is the Timber Measure in use both here and at Cochin.

Timber, both round and square, is measured by the Kole of 24 Borrels or Malabar Inches, answering to 29 1/16 English Inches, or more accurately 29.065, and hence 13824 Cubic Borrels make 1 Candy or Cubic Kole, measuring 24553⅓ Cubic Inches, or 14.209 Cubic Feet English.

The Tooda, by which plank taldoms, &c. are measured, is 576 Borrels square and 2 Borrels

---

* These nine sorts of Grain are Rice, Wheat, Weodso, Tovary, Hessava, Huruli, Avary, Cavlay, and Elin.

TRAVANCORE, *continued.*

thick, and therefore contains 1152 Cubic Borrels, answering to 2046 Cubic Inches, or 1.184 Cubic Foot English.

TRIVANDRUM, See *Quilon.*

TRICHINOPOLY,

In the Southern Division of the Carnatic.

Weights.

The weight used for medicine and all Bazar articles of provisions, in retail trade, is the Pucka Seer, which is equal to 13342 English Grains, and is thus divided:

		lb.	oz.	dr.
9 Star Pagodas...	=1 Pullam..	= 0	1	2
27 Pullams	=1 Pucka Seer	= 1	14	8
2 Pucka Seers...	=1 Quarter Toolam ...	= 3	13	0
13.114 Pucka Seers	=1 Maund ..	=25	0	0

The Seer used for weighing the above articles by wholesale, is composed of 27 Pullums of 10 Star Pagodas each, and therefore equals 2lb. 1¾ oz.: hence 11.387 such Seers are equal to 1 Maund of 25lb. The above Seers are divided into halves, quarters, &c.

The Vis is equal to 3lb., and therefore 8⅓ of such weights make the Maund.

TRICHINOPOLY, *continued.*

The Seer used for weighing copper, brass, lead, pewter, tin, tutenag, &c. but not iron, whether by wholesale or retail, is equal to 4167.7 Gr. Troy, or 9 oz 8½ dr., and therefore 41.987 such Seers are equal to 1 Maund.

The Madras weights are used at the Custom House of this station, and also occasionally by Merchants.

Measures.

The Measure used for all kinds of grain is equal to 1$\frac{7}{8}$$\frac{7}{4}$ Quart, and is subdivided into halves, quarters, and eighths. Four of these Measures make the Mercal, which answers to 1⅛ Gallon.

It is to be observed, that grain is never sold by weight at Trichinopoly.

The Measure for oil is equal to $\frac{3}{8}\frac{3}{4}$ of an English Quart, and is divided as above. For wholesale, a brass vessel is used, the contents of which are ascertained by this measure.

The Long Measure is the Moora. That used by Stone-cutters equals 33$\frac{1}{8}\frac{1}{0}$ English Inches, and that employed by Carpenters 34$\frac{1}{1}\frac{1}{5}$ ditto.

The Coloo used by Farmers in measuring land, contains 21$\frac{1}{8}$ English Feet.

VELLORE. See *Arcot.*

VISAGAPATAM. See *Masulipatam.*

WALLAJAHBAD. See *Arcot.*

☞ *In concluding this Second Supplement, it may be satisfactory to sum up the number of articles which both Supplements contain, and which comprehend the Weights, Measures, and Monies, of nearly one hundred and fifty Trading Places, of which nothing authentic had been previously published. This augmentation to Commercial Science will appear the more important, when it is considered that the Metrology of India, antecedently known, was confined to less than one-third of the above number, and very few of these articles were duly authenticated. All, however, have been recently examined, and verified, or corrected, by means of the general comparison of Standards.*

*** *The following articles on* INDIAN EXCHANGES *and* GEOGRAPHY *may also prove useful.*

EXCHANGES OF INDIA.

The following Table shews the Course of Exchange between the three Presidencies reciprocally, and between each and London, in the beginning of the year 1827. *(See vol. 2, p. 103.)*

	On London, 6 *Months Sight.*	On Bengal, 30 *Days Sight.*	On Madras, 30 *Days Sight.*	On Bombay, 30 *Days Sight.*
CALCUTTA..	1*s.* 10½*d. per* Sicca Rupee		92 to 96 Sicca Rupees *per* 100 Madras Rupees	98 Sicca Rupees *per* 100 Bombay Rupees
MADRAS	1*s.* 10*d. per* Madras Rupee	107 Madras Rupees *per* 100 Sicca Rupees		100 Madras Rupees *per* 102 Bombay Rupees
BOMBAY	1*s.* 9*d. per* Bombay Rupee	105 Bombay Rupees *per* 100 Sicca Rupees	99½ Bombay Rupees *per* 100 Madras Rupees	

INTERNAL EXCHANGES OF MADRAS.

The Rules for computing the above Exchanges of India are deemed too simple to require illustration; but there is an Internal Exchange at Madras, which is of a complex nature, and therefore requires examples of calculation. This is to convert the Old Currency to the New, according to the following divisions and proportions.

OLD CURRENCY, { 80 Cash = 1 Fanam; 45 Fanams = 1 Star Pagoda | NEW CURRENCY, { 12 Pice = 1 Anna; 16 Annas = 1 Rupee

The proportion between the Old and New Currency is 3½ Rupees for 1 Pagoda.

From the above data the following new Factors are deduced:—*viz.*

75 *Cash, Old Currency, answer to* 14 *Pice, New Currency.*

In comparing these Currencies the given sums must be reduced to the lowest denominations, that is, the Old Currency into Cash, per Table 1; and the New, into Pice, per Table 2.—*Examples:*

Reduce 97 Pagodas, 27 Fanams, 58 Cash (that is, 351418 Cash), Old Currency, into Rupees, Annas, and Pice, New Currency, and the contrary.

	Cash.	Pice.	Cash.	Pice.		Rupees.	Annas.	Pice.	
As	75	: 14 ::	351418	: 65598	— or	341	10	6	New Currency.

Reverse Operation.

	Pice.	Cash.	Pice.	Cash.		Pagodas.	Fanams.	Cash.	
As	14	: 75 ::	65598	: 351418	— or	97	27	58	Old Currency.

Thus also the Old Currency may be converted into Gold Rupees of 15 Silver Rupees each.

. *For the other* TERMS *of Indian Metrology see the preceding Index, page* 361, *also that of* 261; *but as the* PLACES *are alphabetically arranged, they are not inserted in any Index.*

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APPENDIX,

CONTAINING

ILLUSTRATIONS OF INDIAN GEOGRAPHY.

The great use of Geographical Illustration has been exemplified in various parts of this Work, particularly in explaining the Metrology of new States and Colonies (see vol. 1, pp. 349, 357, 404, &c.); but in no Article are such elucidations so necessary as in that of the East Indies, where not only the Weights, Measures, and Monies, are new to Europeans in general, but even the Places to which they belong; for the Geography of India is not accurately known, except on the Coasts, and in those Provinces where modern surveys have been made, such as are now in extensive progress.

With a view, therefore, to elucidate and simplify this obscure but important study, Outlines of India are here prepared, on separate plans, together with new Tables so arranged as to afford a clear and comprehensive view of many essential particulars. But, before these Illustrations are given, some general account seems necessary of Situations, Boundaries, and Divisions.

INDIA is comprehended between the 8th and 35th degrees of North Latitude, and the 74th and 94th degrees of East Longitude. It is bounded on the North by the Hemalaya Mountains; on the East, by the Burman Empire and the Bay of Bengal; on the South, by the Indian Ocean; and on the West, by the Arabian Sea and the River Indus.

These Regions were anciently distinguished under two general heads or divisions, namely, South and North India, that is, the Peninsula and the Mainland. They were supposed to be divided by the Nerbudda River, or rather by a Parallel of Latitude coinciding nearly with that River, and continued to the Mouths of the Ganges in the Bay of Bengal. The whole Peninsula was then called *The Deccan* (which means South), and the Northern Division *Hindostan;* but in modern times this latter name has been applied to all India, and the former to the upper part of the Peninsula.

Modern Geographers have likewise distinguished each of these grand Divisions under two heads: thus, that portion of the Peninsula between the Rivers Nerbudda and Kristna is called *The Deccan*, and the remaining Provinces to Cape Comorin, *Southern India*, and sometimes (though incorrectly) *The Peninsula.*

With respect to the Northern Regions, they have been differently divided by high Authorities;* some proposing the line of intersection to be from North to South, and others from West to East. The latter is the division adopted in the following Table (p. 380), as being in accordance with the Southern Divisions, and also as separating the mountainous Districts of the North from the most fertile and improved Provinces of India.

In that Table there are four ranges of Provinces horizontally placed, and three perpendicularly. The first range is called *Northern Hindostan*, and contains six Provinces; the second, *Hindostan Proper*, containing twelve; the third and fourth divisions, namely, *The Deccan*, and *Southern India*, contain nine Provinces each, making in the whole thirty-six.

With respect to the Outlines of the Provinces, although sketched from the best Authorities, they cannot be all considered as strictly accurate; but they are presumed to be sufficiently correct for the purpose of general illustration, for which they are chiefly intended; and the same may be observed of the Rivers, which form so very interesting as well as important a part of Indian Geography.

In the present attempt to promote perspicuity, by *systematic arrangements* and *unencumbered Maps*, many Towns and all Villages are omitted. These, however, are numerously supplied in the large Maps of *Rennell*, *Arrowsmith*, and *Walker*, from which the following Outlines are deduced, and to which they may prove useful as an introduction. Those great Maps may be also elucidated by the aid of a recent Publication, entitled "*An Index to the Maps of India*," which contains the Latitudes and Longitudes of upwards of twelve thousand Places in Hindostan.

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* *Major Rennell*, who has thrown the greatest light both on the Geography and History of India, proposes a Meridian Line of Intersection; and that division is followed by *Pennant*, *Pinkerton*, and *Playfair*. But the Line from West to East has been more recently adopted by *Hamilton*, *Myers*, and other Geographers. The first Division seems the most natural, as it assigns to the Ganges and Indus (with their Branches) the Regions which they occupy respectively; but then the Line of Intersection must be imaginary, whereas that of the second plan is real, as it coincides with the Provincial Boundaries.

The Indian States belonging to different Powers may be distinguished under three general heads, viz.

1. INDEPENDENT STATES.
2. STATES UNDER BRITISH PROTECTION.
3. BRITISH POSSESSIONS.

INDEPENDENT STATES.

Lahore, Nepaul, Bootan, Caubul, Sinde, and Scindia's Dominions in Agra and in Malwa; also Pondicherry belonging to the French, Goa to the Portuguese, &c.

STATES UNDER BRITISH PROTECTION.

These Countries (which are also called Tributary States) are chiefly the following:

Sikim, Oude, Cutch, and the Rajpoot States. Also those held by the

Rajah of Bhopal in Malwa.

LIKEWISE

Holcar's Dominions in Malwa. The
Gykwar's Dominions in Gujerat.
Nizam's Dominions in Hyderabad, Beeder, and Aurungabad.
Rajah of Satarah's Dominions in Bejapoor.
Rajah of Berar's Dominions in Berar and Gundwana.
Rajah of Mysore's Dominions in Mysore.
Rajah of Cochin's Dominions in Cochin.
Rajah of Travancore's Dominions in Travancore.

ALSO

Assam, Cachar, Jyntia, and Munnipore, lying between Bengal and the Burmese Frontier.

BRITISH POSSESSIONS.

The Possessions of the East India Company comprehend the whole of Hindostan, except the above Independent and Tributary States. See Outlines, p. 381, &c.

These Possessions are arranged under three Presidencies, which have been established for the general purposes of trade and government. They are

THE PRESIDENCY OF BENGAL.
THE PRESIDENCY OF MADRAS.
THE PRESIDENCY OF BOMBAY.

The *Presidency of Bengal*, or *Fort-William*, superintends all the Territories of Hindostan Proper and Northern Hindostan, except the Independent States beforementioned, and the Provinces hereafter stated as subordinate to Madras and Bombay. It also comprehends the Eastern and Northern Parts of Khandeish, Gundwana, and Orissa.

The Presidency of Madras, or *Fort St. George*, comprehends the whole of Southern India, with those Provinces of the Deccan that are not assigned to Bengal or Bombay. Such are The Northern Circars, and the Dominions of the *Nizam*, and the *Rajah of Berar*.

The Presidency of Bombay comprehends Cutch, Gujerat, and some of the Western Districts of Khandeish, Aurungabad, Bejapoor, and Malwa.

Such are the Outlines of the *three* Presidencies; and a *fourth* has been of late years established for the government of certain Settlements in the Eastern Ocean, namely, Prince of Wales' Island, Singapore, and Malacca; for the constitution of which see *Auber's Analysis*, and for their Metrology see the foregoing Supplement.

The Presidencies are divided into Districts, Stations, Collectorships, Factories, Residences, &c.—names which are sufficiently explanatory of their purposes; but there are other local terms commonly used in India, which seem to require explanation, especially as they are introduced into the present Work, in consequence of having been adopted in the Specifications which accompanied the Indian Weights and Measures to London:—as transmitted in obedience to the Order of the Court of Directors, for which see page 325 of this Volume.*

EXPLANATION OF LOCAL TERMS USED IN INDIA.

Bazar, a daily Market—a Market Place.
Chuckla, a District consisting of several Pergunnahs.
Circar, or *Sirkar*, a State—a Government.
Deh, a Village.
Doab, a Tract of Country lying between two Rivers.
Pergunnah, a small District, containing some Villages.
Pettah, the Suburbs of a fortified Town.
Pollam, a District held by a Polegar or Military Chieftain.
Subah, a Province, comprising several Districts, &c.
Subahdar, a Governor or Viceroy of a Province.
Zemandar, a Landholder under peculiar duties.
Zillah, a District having reference to a Court of Justice.

*** For further Explanation of Indian Terms, see *Wilkins' Glossary*, annexed to the fifth Report of the House of Commons on the Affairs of India.

* That important Order has been duly exeented throughout the British Possessions in India and other parts of Asia.—Many Standards have been also received in London from several of the Tributary States; and a few only from the Independent Provinces; which will be seen by referring to the various Articles in the preceding Supplement. It may be added, that the relative situations of the above States and Presidencies are to be understood by comparing them with the followiug Arrangemeut of the Provinces, and their Outlines respeetively, all of which may help to illustrate each other.

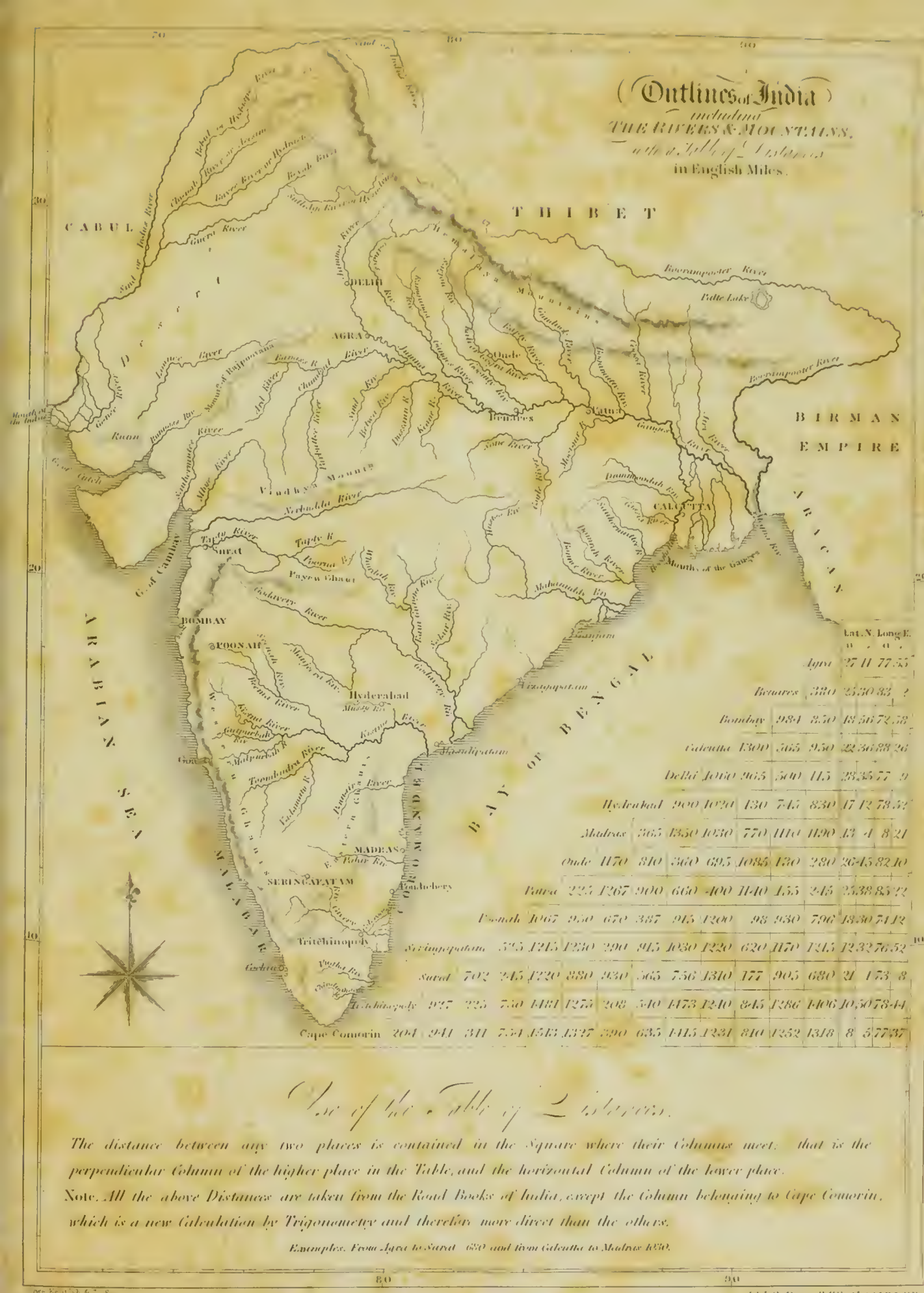
	Provinces, (Westerly).	Chief Towns.	Provinces, (Central).	Chief Towns.	Provinces, (Easterly).	Chief Towns.
1. NORTHERN HINDOSTAN.	Cashmere	Cashmere.	Kumaon, &c.	Almora.	Bootan	Tassisudon.
	Lahore	Lahore.	Nepaul, &c.	Catmandoo.	Assam, &c. ..	Rungpoor.
2. HINDOSTAN PROPER.	Mooltan	Mooltan and Buhawulpoor.	Delhi	Delhi, Meerut, and Bareilly.	Allahabad ..	Allahabad and Benares.
	Ajmeer, &c...	Ajmeer, Odeypoor, & Jeypoor	Agra	Agra, Bhurtpoor & Furruckabad.	Bahar	Bahar, Patna, and Dinapoor.
	Sinde & Cutch	Hyderabad, Tatta, & Bhooj.	Oude	Oude, Lucknow and Fyzabad.	Bengal	Calcutta, Dacca, & Moorshedabad
	Gujerat	Cambay, Surat, & Ahmedabad.	Malwah ..	Ougein, Bhopal and Indore.	Chittagong..	Chittagong and Ramoo.
3. THE DECCAN.	Khandeish ..	Chandore and Boorhanpoor.	Gundwana .	Nagpoor and Ruttenpoor.	Orissa	Balasore and Cuttack.
	Aurungabad .	Bombay and Aurungabad.	Berar.....	Ellichpoor and Gawulgurgh.	Nth. Circars	Ganjam and Masulipatam.
	Bejapoor	Poonah, Goa, and Bejapoor.	Beeder	Beeder and Nandeir.	Hyderabad..	Hyderabad and Golconda.
4. SOUTHERN INDIA.	Canara	Carwar and Mangalore.	Ceded Districts	Bellary and Kurnool.	Nth. Carnatic	Nellore and Ongole.
	Malabar	Tellicherry & Cannanore.	Mysore	Seringapatam and Bangalore.	Cnl. Carnatic	Madras, Arcot, & Pondicherry.
	Cochin and Travancore	Cochin and Trivandrum.	Salem and Coimbetoor	Coimbetoor & Satimngulum.	Sth. Carnatic	Madura, Tanjore, & Trichinopoly.

NORTHERN. **PRINCIPAL RIVERS OF INDIA.** SOUTHERN.

Name.	Source.	Course.	Falls into.	Name.	Source.	Course.	Falls into.
		Eng. Miles.				Eng. Miles.	
Ganges.....	Hemal[a]Mountains	E. S. E. 1500	Bay of Bengal	Nerbudda..	Gundwana	W. 750	Gulf of Cambay
Burampooter	Thibet	E. S. W. 1600	Ganges.	Taptee	Beeder.....	W. S. W. 450	Gulf of Cambay
Jumna	Hemal[a]Mountains	S. E. 780	Ganges.	Mahanuddy	Western Ghauts	S. E. S. E. 550	Bay of Bengal.
Gogra	Kumaon.....	S. E. 500	Ganges.	Godavery ..	Western Ghauts	E. S. E. 800	Do. lat. 19°
Gunduck....	Hemala Mountains	S. E. 500	Ganges.	Kristna	Western Ghauts	E. S. E. 650	Do. lat. 16 15′
Goomty	Kumaon.....	S. E. 300	Ganges.	Pennair....	Mysore	N. S. E. 300	Do. lat. 14 35
Hoogly	Ganges	S. 150	Bay of Bengal	Palar.....	Mysore	S. E. 220	Do. lat. 12 28
Indus	Thibet	W. S. 1650	Arabian Sea.	Coolroon ..	Cavery	N. E. 100	Do. lat. 11 27
Sutledge ..	Thibet	W. S. 600	Indus.	Cavery	Malabar	S. E. S. E. 400	Do. lat. 11 5
Hydaspes ..	Cashmere	W. S. 500	Sutledge.	Tombudara.	Western Ghauts	N. E. 200	Kristna.

WHITING, PRINTER, LOMBARD STREET.

Vol II P 381 Cambist
65°
70°
75°
80°
85°
90°
95°
35°
30°
25°
20°
15°
10°
CAUBUL
CHINESE EMPIRE
Cashmere
Lahore
Garwal
Kumaon
Mooltan
Delhi
Delhi
Agra
Agra
Nepaul
Khatmandu
Oude
Oude
Sikkim
Bootan
Assam
Sinde
Desert
Ajmeer
Rajpootana
Odeypoor
Benares
Allahabad
Bahar
Patna
Bengal
Malwah
Cutch
Gujerat
CALCUTTA
Chittagong
Khandesh
Gundwana
Orissa
Berar
Nagpoor
BOMBAY
Aurungabad
Poonah
Beeder
Circars
Hyderabad
Hyderabad
Bejapoor
Ceded
Districts
Canara
Mysore
Seringapatam
MADRAS
Salem
Malabar
Coimbatoor
The Carnatic
Cochin
Travancore
Ceylon
Outlines of India,
including
THE PROVINCES
and
Principal Cities.
50 100 200 300 350
English Miles
Chas Walker Sculpt



	Lat. N.	Long E.
	° ′	° ′
Agra	27 11	77 53
Benares	330	25 30 83 ?
Bombay	984	8 50 18 56 72 58
Calcutta	1300	365 9 50 22 36 88 26
Delhi	1060	965 500 115 28 35 77 9
Hyderabad	900	1020 130 745 830 17 12 78 32
Madras	365	1350 1030 770 1110 1190 13 4 80 21
Oude	1170	810 360 695 1085 130 280 26 45 82 10
Patna	225	1267 900 650 400 1140 155 245 25 38 85 22
Poonah	1067	950 670 387 915 1200 98 930 796 18 30 74 12
Seringapatam	575	1215 1230 290 915 1030 1220 620 1170 1245 12 32 76 52
Surat	702	245 1220 880 930 565 756 1310 177 905 680 21 173 8
Tritchinopoly	927	225 750 1181 1275 208 540 1473 1240 845 1286 1406 10 50 78 44
Cape Comorin	204	941 311 754 1545 1327 590 635 1415 1231 810 1252 1318 8 5 77 37

Use of the Table of Distances.

The distance between any two places is contained in the Square where their Columns meet: that is the perpendicular Column of the higher place in the Table, and the horizontal Column of the lower place.

Note. All the above Distances are taken from the Road Books of India, except the Column belonging to Cape Comorin, which is a new Calculation by Trigonometry and therefore more direct than the others.

Examples. From Agra to Surat 650 and from Calcutta to Madras 1030.